GEOLOGIC BORING LOG

DRAFT

Project: Tank Trailer Storage Area **LEA Comm No:** 68VC610 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 11/12/96 **End Date** 11/12/96	**Boring ID** SA-SB-100

Drilling Contractor: LEA
Drilling Method: Hand Auger
Sampling Method: Bucket Auger
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: L. Bianchi
Drilling Foreman: J. Sweeton
Drill Rig: Hand Auger
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1021136	100		2": Forest litter; 10": Black, fine SAND, some Silt, moist, loose, root fragments, organic layer	0.0
	1021137	100		Light yellowish brown, fine SAND, little Silt, moist, loose mottled	0.0
				Bottom of Boring at 2.0'	
4					
8					
12					
16					
20					
24					

RCRA RECORDS CENTER
FACILITY Pratt & Whitney - Main St
I.D. NO. CTD990672081
FILE LOC. R-5
OTHER RDMS #2534

Comments: Auger hole backfilled upon completion

Printed On: 6/17/1998

Boring No: SA-SB-100

LEA
LOUREIRO ENGINEERING ASSOCIATES, PC
100 Northwest Drive, Plainville, Connecticut, 06062, Phone(203)747-6181 FAX (203)747-8822

GEOLOGIC BORING LOG

Project: Tank Trailer Storage Area **LEA Comm No:** 68VC610 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 11/12/96 **End Date** 11/12/96	**Boring ID** **SA-SB-101**

Drilling Contractor: LEA
Drilling Method: Hand Auger
Sampling Method: Bucket Auger
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: L. Bianchi
Drilling Foreman: J. Sweeton
Drill Rig: Hand Auger
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1021138	100		2": Forest litter; 10" Strong brown, fine SAND, little Silt, moist, loose	0.0
	1021139	100		Light brown, fine SAND, little Silt, moist, loose	0.0
				Bottom of Boring at 2'	
4					
8					
12					
16					
20					
24					

Comments: Auger hole backfilled upon completion.

Printed On: 6/17/1998

Boring No: -SB-101

LEA
LOUREIRO ENGINEERING ASSOCIATES, PC
100 Northwest Drive, Plainville, Connecticut, 06062, Phone(203)747-6181 FAX (203)747-8822

GEOLOGIC BORING LOG

Project: Tank Trailer Storage Area **LEA Comm No:** 68VC610 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 11/12/96 **End Date** 11/12/96	**Boring ID** **SA-SB-102**

Drilling Contractor: LEA
Drilling Method: Hand Auger
Sampling Method: Bucket Auger
Groundwater Observations:
Depth: NM **At:** **Hours** ▽
Depth: **At:** **Hours** ▼

Logged By: L. Bianchi
Drilling Foreman: J. Sweeton
Drill Rig: Hand Auger
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1021140	100		Strong brown, fine SAND and SILT, moist, loose	3.0
	1021141	100		5": As Above; 7": Light greyish brown, fine SAND, trace Silt, moist, loose	0.0
				Bottom of Boring at 2.0'	
4					
8					
12					
16					
20					
24					

Comments: Auger hole backfilled upon completion.

Printed On: 6/17/1998

Boring No: SA-SB-102

LEA
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GEOLOGIC BORING LOG

Project: Tank Trailer Storage Area **LEA Comm No:** 68VC610 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 11/12/96 **End Date** 11/12/96	**Boring ID** **SA-SB-103**

Drilling Contractor: LEA
Drilling Method: Hand Auger
Sampling Method: Bucket Auger
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: L. Bianchi
Drilling Foreman: J. Sweeton
Drill Rig: Hand Auger
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1021142	100		Light brown, fine SAND, little Silt, moist, loose	0.0
	1021143	100		As Above	0.0
				Bottom of Boring at 2.0'	
4					
8					
12					
16					
20					
24					

Comments: Auger hole backfilled upon completion.

Printed On: 6/17/1998

Boring No: SB-103

LEA
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GEOLOGIC BORING LOG

Project: Tank Trailer Storage Area
LEA Comm No: 68VC610
Client: Pratt & Whitney
Location: East Hartford, CT

Start Date 11/12/96
End Date 11/12/96

Boring ID SA-SB-104

Drilling Contractor: LEA
Drilling Method: Hand Auger
Sampling Method: Bucket Auger
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: L. Bianchi
Drilling Foreman: J. Sweeton
Drill Rig: Hand Auger
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1021144 1021145	100		2": Forest litter; 5": Black, fine SAND and SILT, moist, loose, organic matter, root fragments; 5": Olive brown,	0.0
	1021146	100		fine SAND, with Silt, trace medium Sand, moist, loose	0.0
				As Above	
				Bottom of Boring at 2.0'	
4					
8					
12					
16					
20					
24					

Comments: Auger hole backfilled upon completion.

Printed On: 6/17/1998

Boring No: SA-SB-104

LEA
LOUREIRO ENGINEERING ASSOCIATES, PC
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GEOLOGIC BORING LOG

Project: Tank Trailer Storage Area **LEA Comm No:** 68VC610 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 11/12/96 **End Date** 11/12/96	**Boring ID** **SA-SB-105**

Drilling Contractor: LEA
Drilling Method: Hand Auger
Sampling Method: Bucket Auger
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: L. Bianchi
Drilling Foreman: J. Sweeton
Drill Rig: Hand Auger
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1021147	100		2": Forest litter; 10": Black, fine SAND and SILT, moist, loose, organic matter, root fragments	0.0
	1021106	100		2": Brown, fine SAND, with Silt, moist, loose; 10": Greenish grey, SILT and fine SAND, moist, loose, mottled	0.0
				Bottom of Boring at 2.0'	
4					
8					
12					
16					
20					
24					

Comments: Auger hole backfilled upon completion.

Printed On: 6/17/1998

Boring No. -SB-105

LEA
LOUREIRO ENGINEERING ASSOCIATES, PC
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GEOLOGIC BORING LOG

Project: Tank Trailer Storage Area
LEA Comm No: 68VC610
Client: Pratt & Whitney
Location: East Hartford, CT

Start Date 11/12/96
End Date 11/12/96

Boring ID SA-SB-106

Drilling Contractor: LEA
Drilling Method: Hand Auger
Sampling Method: Bucket Auger
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: L. Bianchi
Drilling Foreman: J. Sweeton
Drill Rig: Hand Auger
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1021107 1021108	100 100		2": Forest litter; 10": Black, fine SAND and SILT, moist, loose, root fragments, organic layer 3" Brown, fine SAND, with Silt, moist, loose; 9": Greenish grey, SILT and fine SAND, moist, loose	0.0 0.0
				Bottom of Boring at 2.0'	
4					
8					
12					
16					
20					
24					

Comments: Auger hole backfilled upon completion.

Printed On: 6/17/1998

Boring No: SA-SB-106

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GEOLOGIC BORING LOG

Project: Tiedown Area **LEA Comm No:** 68V7033 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 01/16/97 **End Date** 01/16/97	**Boring ID** **SK-SB-107**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: D. Brisson
Drilling Foreman: J. Sweeton
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1024987	63		Top 4": Pavement and Traprock; Next 4": Brown, fine to very fine SAND, trace(-) Gravel, moist, dense; 3": Orange brown, fine SAND, moist, loose; Bottom 3": Grey brown, fine SAND, trace very fine SAND, moist, dense	0
	1024988	63		Top 4": As Above; Bottom 11": Orange brown, fine SAND, trace medium Sand, moist, loose	0
4	1024989	63		Top 10": As Above; Bottom 5": Grey, fine SAND, little medium Sand, wet, loose	0
	1024990	63		As Above	7
8	1024991	75		Top 12": Orange brown-grey, fine SAND, little medium Sand, wet, loose; Bottom 6": Grey, CLAY, trace fine Sand, wet, dense	10
	1024992	75		As Above	10
12				Bottom of Boring at 12'	
16					
20					
24					

Comments: Borehole backfilled with bentonite chips upon completion.

LEA
LOUREIRO ENGINEERING ASSOCIATES, PC
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GEOLOGIC BORING LOG

Project: Tiedown Area
LEA Comm No: 68V7033
Client: Pratt & Whitney
Location: East Hartford, CT

Start Date 01/16/97
End Date 01/16/97

Boring ID SK-SB-108

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: D. Brisson
Drilling Foreman: J. Sweeton
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1024993	63		Top 4": Blacktop & Traprock; Middle 6": Brown, fine to very fine SAND, trace(-) medium Sand, trace organics moist, dense; Bottom 5": Orange brown, fine to very fine SAND, trace(-) medium Sand, moist, dense	0
	1024994	63		Top 4": Grey, fine to very fine SAND, moist, dense; Bottom 11": Grey, fine SAND, trace(-) medium Sand, moist, loose	0.0
4	1024995	75		Top 14": As Above; Bottom 4"; Orange brown, medium to fine SAND, moist, loose	0
	1024996	75		Top 2": As Above; Middle 3": Grey, fine SAND, trace(-) medium Sand, wet, moderately dense; Bottom 13": Grey, medium to fine SAND, wet, loose	10
8	1024997 1024998	63		As Above	80
	1024999	63		Top 10": As Above; Bottom 5": Grey, CLAY, trace(-) fine Sand, wet, dense	5
12				Bottom of Boring at 12'	
16					
20					
24					

Comments: Borehole backfilled with bentonite chips upon completion.

Printed On: 1/23/1998

Boring No: SK-SB-108

LOUREIRO ENGINEERING ASSOCIATES, PC
100 Northwest Drive, Plainville, Connecticut, 06062, Phone(203)747-6181 FAX (203)747-8822

GEOLOGIC BORING LOG

Project: Tiedown Area **LEA Comm No:** 68V7033 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 01/16/97 **End Date** 01/16/97	**Boring ID** **SK-SB-109**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: D. Brisson
Drilling Foreman: J. Sweeton
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1025000	63		Top 4": Top Soil; Middle 4": Brown, fine to very fine SAND, trace(-) medium Sand, moist, dense; Bottom 7": Orange brown, fine to very fine SAND, trace medium Sand, moist, dense	0
	1025001	63		Grey brown, fine SAND, trace medium Sand, moist, loose, 1/2" Clay lense in bottom of sample	0
4	1025002	75		As Above	0
	1025003	75		Grey, fine SAND, wet, loose	5
8	1025004	75		As Above	40
	1025005	75		Top 10": As Above; Bottom 8": Grey, CLAY, trace(-) fine Sand, wet, dense	10
12				Bottom of Boring at 12'	
16					
20					
24					

Comments: Borehole backfilled with bentonite chips upon completion.

Printed On: 1/22/1998

Boring N

SK-SB-109

LEA
LOUREIRO ENGINEERING ASSOCIATES, PC
100 Northwest Drive, Plainville, Connecticut, 06062, Phone(203)747-6181 FAX (203)747-8822

GEOLOGIC BORING LOG

Project: Tiedown Area **LEA Comm No:** 68V7033 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 01/20/97 **End Date** 01/20/97	**Boring ID** SK-SB-110

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: NM **At:** **Hours** ▽
Depth: **At:** **Hours** ▼

Logged By: D. Brisson
Drilling Foreman: J. Sweeton
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1025010	75		Top 2": Topsoil; Middle 6": Grey brown, fine to medium SAND, trace organics, moist; Bottom 10": Orange brown, fine SAND, trace(-) medium Sand, moist, loose	0
	1025011	75		As Above	0
4	1025012	63		Alternating bands of grey-orange brown, fine SAND, trace medium Sand, moist, loose	5
	1025013 1025014	63		Top 4": As Above; Bottom 11": Grey, fine to medium SAND, wet, loose, petroleum odor	30
8	1025015	63		Top 6": Grey, fine SAND, wet, moderately dense, petroleum odor; Middle 2": Orange, fine SAND, wet, heavy iron staining, moderately dense; Bottom 7": Greenish grey, fine SAND, wet, loose	45
	1025016	63		Top 6": As Above, grading to medium to fine SAND; Middle 3": Grey, coarse to fine SAND, trace(-) fine Gravel, wet, loose; Bottom 6": Grey, CLAY, trace(-) fine to very fine Sand, wet, moist	40
12				Bottom of Boring at 12'	
16					
20					
24					

Comments: Borehole backfilled with bentonite chips upon completion.

Printed On: 1/22/1998

Boring No: SK-SB-110

LEA
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100 Northwest Drive, Plainville, Connecticut, 06062, Phone(203)747-6181 FAX (203)747-8822

GEOLOGIC BORING LOG

Project: Tiedown Area **LEA Comm No:** 68V7033 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 01/20/97 **End Date** 01/20/97	**Boring ID** **SK-SB-111**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: D. Brisson
Drilling Foreman: J. Sweeton
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1025017	83		Top 3": Topsoil; Bottom 17": Brown, fine SAND, trace organics, moist, loose	
	1025018	83		Orange brown, fine SAND, trace(-) medium Sand, moist, loose	
4	1025019	63		Top 10": Grey, fine SAND, moist, loose; Bottom 5": Light brown, fine SAND, trace(+) medium Sand, moist, loose	
	1025020	63		Top 4": As Above; Middle 7": Grey, fine SAND, wet, loose, petroleum odor; Bottom 4": Grey, fine SAND, trace(-) medium Sand, wet, petroleum odor	
8	1025021	75		Top 6": As Above, petroleum odor; Middle 2": Orange, fine SAND, heavy iron staining, wet, dense; Bottom 10": Greensh grey, fine SAND, wet, moderately dense	
	1025022	75		Top 16": As Above; Middle 1": Grey, coarse to fine Sand, trace fine Gravel, wet, loose; Bottom 1": Grey, CLAY, trace fine Sand, wet, dense	
12		100		As Above	
				Bottom of Boring at 13'	
16					
20					
24					

Comments: FID Malfunction. Borehole backfilled with bentonite chips upon completion.

Printed On: 1/22/1998

Boring N

K-SB-111

LEA
LOUREIRO ENGINEERING ASSOCIATES, PC
100 Northwest Drive, Plainville, Connecticut, 06062, Phone(203)747-6181 FAX (203)747-8822

GEOLOGIC BORING LOG

Project: Tiedown Area **LEA Comm No:** 68V7033 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 01/20/97 **End Date** 01/20/97	**Boring ID** **SK-SB-112**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: NM **At:** **Hour**
Depth: **At:** **Hours**

Logged By: D. Brisson
Drilling Foreman: J. Sweeton
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1025023	83		Top 2": Topsoil; Bottom 18": Brown, fine SAND, trace(-) medium Sand, trace organics, moist, moderately dense	
	1025024	83		Orange brown, fine SAND, trace(-) medium Sand, moist, loose	
4	1025025	63		Top 5": As Above; Bottom 10": Grey brown, fine SAND, trace medium Sand, moist, loose	
	1025026	63		Top 10": As Above; Bottom 5": Grey, medium to fine SAND, wet, loose, NO petroleum odor	
8	1025027	75		Top 8": As Above; Middle 3": Orange, fine SAND, heavy iron staining, wet, dense; Bottom 7": Greenish grey, fine SAND, wet, moderately dense	
	1025028	75		Top 14": As Above; Middle 1": Grey, coarse to fine SAND, trace fine Gravel, wet, loose; Bottom 2": Grey, CLAY, trace(+) fine Sand, wet, dense	
12				Bottom of Boring at 12'	
16					
20					
24					

Comments: FID Malfunction. Borehole backfilled with bentonite chips upon completion.

Printed On: 1/22/1998

Boring No: SK-SB-112

LEA
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GEOLOGIC BORING LOG

Project: Tiedown Area **LEA Comm No:** 68V7033 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 01/20/97 **End Date** 01/20/97	**Boring ID** **SK-SB-113**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: D. Brisson
Drilling Foreman: J. Sweeton
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1025029	42		Top 6": Topsoil - large Cobbles; Bottom 4": Orange brown, fine SAND, large Cobbles in sample, Cobble lodged in tip	
				No Recovery	
4	1025031	63		Alternating bands of grey-orange brown, fine SAND, moist, loose	
	1025032	63		Grey, fine SAND, trace medium SAND, wet at Bottom 7", loose, slight petroleum odor on wet material	
8	1025033	75		Top 10": As Above; Middle 2": Orange, fine SAND, heavy iron staining, dense, wet; Bottom 6": Greenish grey, fine SAND, wet, dense	
	1025034	75		Top 12": As Above; Middle 3": Grey, coarse to fine SAND, trace(-) fine Gravel, wet, loose; Bottom 3": Grey, CLAY, trace(-) fine Sand, wet, dense	
12				Bottom of Boring at 12'	
16					
20					
24					

Comments: FID Malfunction. Borehole backfilled with bentonite chips upon completion.

Printed On: 1/22/1998

Boring No. SK-SB-113

LEA
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100 Northwest Drive, Plainville, Connecticut, 06062, Phone(203)747-6181 FAX (203)747-8822

GEOLOGIC BORING LOG

Project: Tiedown Area
LEA Comm No: 68V7033
Client: Pratt & Whitney
Location: East Hartford, CT

Start Date 01/21/97
End Date 01/21/97

Boring ID SK-SB-114

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: D. Brisson
Drilling Foreman: J. Sweeton
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1025037	63		Top 6": Topsoil; Middle 2": Light brown, medium to fine SAND, moist, loose; Bottom 7": Orange brown, fine SAND, trace organics, moist, moderately dense	0
	1025038	63		Orange brown, grading to grey, fine SAND, trace(-) medium Sand, moist, moderately dense	0
4	1025039	75		As Above (grey, fine SAND)	2
	1025040 1025041	75		Top 10": As Above; Bottom 8": Grey, fine to medium SAND, trace(+) medium Sand, wet, loose, petroleum odor	10
8	1025042	42		Top 7": As Above (no petroleum odor); Bottom 3": Greenish grey, fine SAND, little medium Sand, wet, loose	2
	1025043	42		Top 9": As Above, grading to orange brown; Bottom 1": Grey, CLAY, trace(-) fine Sand, wet, dense	2
12				Bottom of Boring at 12'	
16					
20					
24					

Comments: Borehole backfilled with bentonite chips upon completion.

Printed On: 1/22/1998

Boring No: SK-SB-114

LEA
LOUREIRO ENGINEERING ASSOCIATES, PC
100 Northwest Drive, Plainville, Connecticut, 06062, Phone(203)747-6181 FAX (203)747-8822

GEOLOGIC BORING LOG

Project: Tiedown Area **LEA Comm No:** 68V7033 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 01/21/97 **End Date** 01/21/97	**Boring ID** **SK-SB-115**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: D. Brisson
Drilling Foreman: J. Sweeton
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1025044	75		Top 4": Topsoil; Middle 10": Brown, fine SAND, trace(-) medium Sand, trace organics, moist, dense; Bottom 4": Orange brown, fine SAND, moist, moderately dense	0
	1025045	75		As Above	0
4	1025046	75		Top 15": Grey, fine SAND, moist, moderately dense; Bottom 3" : Grey, fine SAND, trace(+) medium Sand, moist	2.0
	1025047	75		As Above, wet in Bottom 8" of sample, high petroleum odor in wet portion	150.0
8	1025048	63		Top 7": As Above, visible product (clear, shiny) on soil; Bottom 8": Greenish grey, fine SAND, trace(-) medium Sand, wet, moderately dense	700.0
	1025049	63		Top 10": As Above; 1": Lens of orange, fine SAND, heavy iron staining; Middle 3": Greenish grey, fine SAND, trace(-) medium Sand, wet, moderately dense; Bottom 1" : Grey, CLAY, trace(-) fine Sand, wet, dense	30.0
12				Bottom of Boring at 12'	
16					
20					
24					

Comments: Borehole backfilled with bentonite chips upon completion.

LEA
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GEOLOGIC BORING LOG

Project: Tiedown Area **LEA Comm No:** 68V7033 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 01/21/97 **End Date** 01/21/97	**Boring ID** SK-SB-116

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: D. Brisson
Drilling Foreman: J. Sweeton
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1025050	83		Top 6": Topsoil; Bottom 14": Brown, fine to very fine SAND, trace organics, moist, dense	0
	1025051	83		Orange brown, fine SAND, trace organics, moist, dense	0
4	1025052	75		Orange brown, fine to medium SAND, moist, loose	0
	1025053	75		Top 10": As Above; Bottom 8": Grey, fine SAND, trace(-) medium Sand, wet, loose, slight petroleum odor	20
8	1025054	83		Top 10": Grey, fine to medium SAND, wet, loose, petroleum odor; Bottom 10": Orange brown, fine SAND, trace(+) medium Sand, wet, NO petroleum odor	30
	1025055	74		Top 15": As Above; Middle 2": Grey, coarse to fine SAND, wet, loose; Bottom 3": Grey, CLAY, trace fine Sand, wet, dense	0
12				Bottom of Boring at 12.25'	
16					
20					
24					

Comments: Borehole backfilled with bentonite chips upon completion.

Printed On: 1/22/1998

Boring No: SK-SB-116

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GEOLOGIC BORING LOG

Project: Add. Invest. Fire Trning Area A **LEA Comm No:** 68V7037 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 1/30/97 **End Date** 1/30/97	**Boring ID** SK-SB-117

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: D. Brisson
Drilling Foreman: J. Sweeton
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1025906	83		Top 6": Topsoil, frozen; Bottom 14": Dark brown, grading to grey brown, fine SAND, trace(-) very fine Sand, trace organics, moist, moderately dense	0
	1025907 1025908	83		Top 10": Grey brown, fine SAND, moist, moderately dense; Bottom 10": Red brown, fine SAND, trace(-) medium Sand, moist, moderately dense	0
4	1025909	83		Top 12": Grey, fine SAND, wet, loose; Middle 2": Grey, coarse to fine SAND, wet, loose; Bottom 6": Greenish grey, fine SAND, trace(-) medium Sand, wet, loose	0
	1025910	83		Top 18": Greenish grey grading to grey brown, fine SAND, trace(-) medium Sand, wet, moderately dense; Bottom 2": Grey, coarse to fine SAND, wet, loose	0
8	1025911	83		Top 10": Grey, fine SAND, wet, loose; Bottom 10": Greenish grey, medium to fine SAND, trace(-) coarse Sand, wet, loose	2
	1025912	83		Top 12": Greenish grey, fine SAND, trace(+) medium Sand, wet, loose; Middle 7": Orange brown, coarse to fine Sand, wet, heavy iron staining, loose; Bottom 1": Grey, CLAY, trace fine Sand, wet, dense	4
12				Bottom of boring at 12'	
16					
20					
24					

Comments: Borehole backfilled with bentonite chips upon completion.

Printed On: 1/21/1998

Boring No. SK-SB-117

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GEOLOGIC BORING LOG

Project: Add. Invest. Fire Trning Area A **LEA Comm No:** 68V7037 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 1/30/97 **End Date** 1/30/97	**Boring ID** **SK-SB-118**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: D. Brisson
Drilling Foreman: J. Sweeton
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1025913	92		Top 6": Top soil, frozen; Bottom 16": Dark brown, fine SAND, trace very fine Sand, trace organics, moist, moderately dense	0
	1025914	92		Top 8": Dark brown, fine SAND, trace very fine Sand, moist, moderately dense; Bottom 14": Grey brown, fine SAND, trace(-) medium Sand, moist, moderately dense	0
4	1025915	83		Top 15": As above; Bottom 5": Orange brown, medium SAND, trace fine Sand, moist, moderately dense	0
	1025916	83		Top 6": As above: Bottom 16": Grey brown, medium SAND, trace fine Sand, some coarse Sand, wet, loose	6.0
8	1025917	92		Top 8": As above; Bottom 14": Grey brown, fine SAND, some medium Sand, wet, loose	25.0
	1025918	92		Top 16": Orange brown, medium SAND, trace fine Sand, trace coarse Sand, wet, loose; Bottom 6": Grey, CLAY, trace Silt, wet, dense	11.0
12				Bottom of boring at 12'	
16					
20					
24					

Comments: Borehole backfilled with bentonite chips upon completion.

Printed On: 1/21/1998

Boring No: SK-SB-118

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GEOLOGIC BORING LOG

Project: Add. Invest. Fire Trning Area A **LEA Comm No:** 68V7037 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 1/30/97 **End Date** 1/30/97	**Boring ID** **SK-SB-119**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: D. Brisson
Drilling Foreman: J. Sweeton
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1025919	88		Top 11": Brown, fine SAND, trace medium Sand, trace coarse Gravel, trace organic, frozen; Bottom 10": Brown, fine SAND, trace medium Sand, trace organic, moist, moderate density	0
	1025920	88		Top 8": Brown, medium SAND, trace fine Sand, trace coarse Sand, trace coarse Gravel, trace organic, moist, moderate density; Bottom 13": Dark brown, medium SAND,	0
4	1025921	58		trace fine Sand, trace coarse Sand, trace coarse Gravel, moist, moderate density	205.0
	1025922	58		Top 6": As above; Bottom 8": Blackish brown, fine SAND, some medium Sand, trace Silt, trace organic, pieces of wood, wet, moderately dense	>1000
8	1025923	50		Top 8": As above; Bottom 6": Dark brown, medium SAND, trace fine Sand, trace Silt, wet, moderate density	0.5
	1025924	50		Orange brown, medium SAND, trace fine Sand, some coarse Sand, trace Gravel, wet, loose	10.0
12				Brown, medium SAND, trace fine Sand, trace coarse Sand, wet, loose	
				Top 10": As above; Bottom 2": Grey, CLAY, trace Silt, wet, dense	
16				Bottom of boring at 13'	
20					
24					

Comments: Borehole backfilled with bentonite chips upon completion.

Printed On: 1/21/1998

Boring N

K-SB-119

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GEOLOGIC BORING LOG

Project: Add. Invest. Fire Trning Area A **LEA Comm No:** 68V7037 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 1/31/97 **End Date** 1/31/97	**Boring ID** **SK-SB-120**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: D. Brisson
Drilling Foreman: J. Sweeton
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1025927	63		Top 10": Dark brown, fine to very fine SAND, trace(-) Silt, trace organics, moist, dense; Bottom 5": Grey brown, fine to very fine SAND, moist, moderately dense	0
	1025928 1025929	63		Top 8": As above; Middle 2": Orange brown, fine SAND, trace(-) very fine SAND, moist, loose; Bottom 5": Orange brown, fine SAND, wet, loose	0
4	1025930	75		Top 10": As above; Bottom 8": Grey brown, fine SAND, trace(-) very fine Sand, dense, wet	0
	1025931	75		Top 3": As above; Bottom 15": Greenish grey to grey, fine SAND, trace(+) medium Sand, wet, loose	2.0
8	1025932	67		As above	2.0
	1025933	80		Top 22": Grey to greenish grey, fine SAND, trace(+) medium Sand, wet, loose; Bottom 2": Grey, CLAY, trace(-) fine Sand, wet, dense	
12				Bottom of boring at 12.5'	
16					
20					
24					

Comments: Borehole backfilled with bentonite chips upon completion.

Printed On: 1/21/1998

Boring No: SK-SB-120

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GEOLOGIC BORING LOG

Project: Add. Invest. Fire Trning Area A **LEA Comm No:** 68V7037 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 1/31/97 **End Date** 1/31/97	**Boring ID** **SK-SB-121**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: D. Brisson
Drilling Foreman: J. Sweeton
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1025934	75		Top 4": Topsoil; 2": Pavement; 4": Traprock; Bottom 8": Dark brown to grey brown, fine SAND, trace very fine Sand, moist, dense	0
	1025935	75		Top 10": As above; Bottom 8": Orange brown, fine SAND, trace(-) medium Sand, iron staining, wet, loose	0
4	1025936	63		Top 10": As above: Bottom 5": Greenish grey, fine SAND, wet, loose	0
	1025937	63		Top 10": As above; Bottom 5": Grey, fine to medium SAND, trace(-) coarse Sand, wet, loose	1.0
8	1025938	67		Top 6": Grey, fine SAND, wet, loose; Bottom 14": Grey, fine to medium SAND, wet, loose	0
	1025939	67		Top 6": Grey, fine SAND, trace(-) medium Sand, wet, loose; Middle 10": Grey, fine to medium SAND, wet, loose; Bottom 2": Dark grey, fine SAND, wet, loose	0
12				Top 2": Grey, CLAY, trace(-) fine SAND, wet, dense	0
				Bottom of boring at 12.5'	
16					
20					
24					

Comments: Borehole backfilled with bentonite chips upon completion.

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GEOLOGIC BORING LOG

DRAFT

Project: Add. Invest. Fire Trning Area A **LEA Comm No:** 68V7037 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 1/31/97 **End Date** 1/31/97	**Boring ID** SK-SB-122

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: D. Brisson
Drilling Foreman: J. Sweeton
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1025940	92		Top 6": Process stone, frozen; Bottom 16": Dark reddish brown, fine SAND, trace medium Sand, trace Silt, trace organic, moist, moderately dense	0.0
	1025941	92		Dark brown, fine SAND, trace medium Sand, trace Silt, moist, moderate density	0.0
4	1025942	96		Top 18": Orange brown, fine SAND, some medium Sand, trace Silt, moist, moderate density; Bottom 5": Grey brown, medium SAND, some fine Sand, trace coarse Sand, wet, moderate density	0.0
	1025943	96		Grey brown, medium SAND, some coarse Sand, trace fine Sand, wet, loose	0.0
8	1025944	88		Top 12": Orange brown, medium SAND, some coarse Sand, trace fine Sand, wet, loose; Bottom 9": Orange brown, medium SAND, some fine Sand, trace coarse Sand, wet, loose	0.0
	1025945	88		Top 15": Grey brown, medium SAND, trace fine Sand, trace coarse Sand, wet, loose; Bottom 6": Grey, CLAY, trace fine Sand, trace Silt	0.0
12					
16					
20					
24					

Comments: Borehole backfilled with bentonite chips upon completion.

Printed On: 1/21/1998

Boring No: SK-SB-122

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GEOLOGIC BORING LOG

DRAFT

Project: Add. Invest. Fire Trning Area A
LEA Comm No: 68V7037
Client: Pratt & Whitney
Location: East Hartford, CT

Start Date 02/03/97
End Date 02/03/97

Boring ID SK-SB-123

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: D. Brisson
Drilling Foreman: J. Sweeton
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1205948 1025949	63		Top 8": Orange brown, medium to fine SAND, frozen; Middle 6" : Dark brown to grey brown, fine SAND, trace(+) very fine Sand, trace traprock, moist, trace organics, dense;	0.5
	1025950	63		Bottom 1": Grey, fine SAND, trace organics, moderately dense	0
				As above	
4	1025951	75		Top 4": As above; Middle 10": Grey, fine SAND, with bands of orange brown, fine Sand, wet, moderately dense; Bottom 4": Grey, fine SAND, trace medium Sand, wet, loose	0
	1025952	75		Grey to orange brown, fine SAND, trace(+) medium Sand, wet, loose	10
8	1025953	67		Top 6": Grey, coarse to fine SAND, wet, loose; Middle 4": Grey, fine SAND, wet, loose; Bottom 10": Grey, fine SAND, trace(+) medium Sand, wet, loose	10
	1025954	67		Top 4": As above; 10": Greenish grey, fine SAND, trace(-) medium Sand, wet, loose; 5": Orange brown, coarse to fine SAND, heavy iron staining, wet, loose; Bottom 1": Grey, CLAY, trace(-) fine Sand, wet, dense	0
12		100		As above bottom 1"	
				Bottom of boring at 12.5'	
16					
20					
24					

Comments: Borehole backfilled with bentonite chips upon completion.

Printed On: 1/21/1998

Boring N K-SB-123

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GEOLOGIC BORING LOG

Project: Add. Invest. Fire Trning Area A **LEA Comm No:** 68V7037 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 2/3/97 **End Date** 2/3/97	**Boring ID** SK-SB-124

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: D. Brisson
Drilling Foreman: J. Sweeton
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1025955	58		Top 6": Dark brown, medium SAND, some fine Sand, some coarse Gravel, frozen; Bottom 8": Red brown, medium SAND, some fine Sand, trace coarse Gravel, moist, moderately dense	0
	1025956	58		Top 6": Red brown, medium SAND, some fine Sand, trace coarse Sand, moist, moderately dense; Bottom 8": Brown, fine SAND, trace medium Sand, moist, moderately dense	0
4	1025957	92		Top 12": Brown, medium SAND, some fine Sand, moist, moderate density; Bottom 10": Brown, fine SAND, some medium Sand, moist, moderate density	0
	1025958	92		Brown, medium SAND, trace fine Sand, wet, moderate density	10
8	1025959	92		Top 11": Brown, medium SAND, trace fine Sand, trace coarse Sand, wet, loose; Bottom 11": Brown, medium SAND, some coarse Sand, trace fine Sand, wet, loose	5
	1025960	92		Top 18": Red brown, medium SAND, some coarse Sand, trace fine Sand, wet, loose; Bottom 4": Grey, CLAY, trace Silt, wet, moderately dense	0
12				Bottom of boring at 12.0'	
16					
20					
24					

Comments: Borehole backfilled with bentonite chips upon completion.

Printed On: 1/21/1998

Boring No: SK-SB-124

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GEOLOGIC BORING LOG

Project: Add. Invest. Fire Trning Area A **LEA Comm No:** 68V7037 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 2/3/97 **End Date** 2/3/97	**Boring ID** SK-SB-125

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: D. Brisson
Drilling Foreman: J. Sweeton
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1025961	42		Top 6": Brown, fine to medium SAND, traprock in top 6", frozen, dense; Middle 2": Brown, fine to very fine SAND, trace medium Sand, frozen, dense; Bottom 2": Grey brown, fine SAND, trace organics, moist, loose	
	1025962	42		As above	
4	1025963	63		Top 10": Grey brown, fine SAND, moist to wet, dense; Bottom 5": Grey, medium to fine SAND, wet, loose	
	1025964	63		Top 5": As above; Bottom 10": Greenish grey, fine SAND, wet, loose	
8	1025965	83		Grey, fine SAND, little medium Sand, wet, loose	
	1025966	83		Top 6": Greenish grey, fine to medium SAND, wet, loose; Middle 10": Orange brown, medium to fine SAND, trace coarse Sand, wet, loose; Bottom 4": Grey, CLAY, trace fine Sand, wet, dense	
12				Bottom of boring at 12'	
16					
20					
24					

Comments: Borehole backfilled with bentonite chips upon completion.

Printed On: 1/21/1998

Boring N SK-SB-125

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GEOLOGIC BORING LOG

Project: Add. Invest. Fire Trning Area A **LEA Comm No:** 68V7037 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 2/4/97 **End Date** 2/4/97	**Boring ID** **SK-SB-126**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: D. Brisson
Drilling Foreman: J. Sweeton
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1025969	42		Top 3": Pavement; Middle 4": Brown, medium to fine SAND, traprock in sample, frozen; Bottom 3": Dark brown, fine SAND, trace very fine Sand, moist, dense	0
	1025970 1025971	42		As above	0
4	1025972	75		Top 5": Orange, brown, fine SAND, trace(-) medium Sand, moist, loose; Middle 10": Grey, fine SAND, alternating bands of grey and orange brown, very fine Sand, 1/4" wide, wet, moderately dense; Bottom 3": Greenish grey; fine SAND, wet, moderately dense	6
	1025973	75		Top 10": As above; Middle 3": Grey, medium to fine SAND, wet, loose; Bottom 5": Grey, fine SAND, wet, loose	20
8	1025974	72		Orange brown, fine to medium SAND, trace(-) coarse Sand, wet, loose	0
	1025975	72		Top 17": Greenish grey, fine SAND, trace(-) medium Sand, wet, loose; Bottom 1": Grey, CLAY, trace(-) fine Sand	0
12		50		As above	
				Bottom of boring at 12.5'	
16					
20					
24					

Comments: Borehole backfilled with bentonite chips upon completion.

Printed On: 1/21/1998

Boring No: SK-SB-126

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GEOLOGIC BORING LOG

Project: Add. Invest. Fire Trning Area A **LEA Comm No:** 68V7037 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 2/4/97 **End Date** 2/4/97	**Boring ID** **SK-SB-127**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: D. Brisson
Drilling Foreman: J. Sweeton
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1025976	63		Top 3": Pavement; Middle 5": Traprock and brown, medium to fine SAND, frozen; Bottom 7": Dark brown, fine to very fine SAND, moist, dense	0
	1025977	63		Orange brown, fine SAND, trace(-) very fine Sand, moist, moderately dense	0
4	1025978	83		Top 15": Grey, fine SAND, moist, moderately dense; Bottom 5": Grey, fine to medium SAND, wet, loose, slight petroleum odor	70
	1025979	83		As above (slight petroleum odor)	400
8	1025980	83		Top 15": Grey to orange brown, medium to fine SAND, trace(-) coarse Sand, wet, loose; Bottom 5": Greenish grey, fine SAND, wet, moderately dense	0
	1025981	83		Top 10": As above; Middle 6": Alternating bands of grey and orange brown, fine to medium SAND, trace(-) coarse Sand, wet, dense; Bottom 4": Grey, CLAY, trace(-) fine SAND, wet, dense	0
12				Bottom of boring at 12'	
16					
20					
24					

Comments: Borehole backfilled with bentonite chips upon completion.

Printed On: 1/21/1998

Boring # SK-SB-127

LEA
LOUREIRO ENGINEERING ASSOCIATES, PC
100 Northwest Drive, Plainville, Connecticut, 06062, Phone(203)747-6181 FAX (203)747-8822

GEOLOGIC BORING LOG

Project: Add. Invest. Fire Trning Area A **LEA Comm No:** 68V7037 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 2/4/97 **End Date** 2/4/97	**Boring ID** **SK-SB-128**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: D. Brisson
Drilling Foreman: J. Sweeton
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1025982	42		Top 2": Pavement; 2": Red brown, fine SAND, trace organics, frozen; 4": Dark brown, fine to very fine SAND, trace(-) Silt, moist, dense; Bottom 2": Grey brown, fine SAND, trace(-) very fine Sand, moist, dense	0
	1025983	42		As above	0
4	1025984	75		Top 4": Red brown, fine SAND, wet, loose; Bottom 14": Alternating bands of grey and orange brown, fine SAND, wet, moderately dense	0
	1025985	75		Grey to orange brown, fine to medium SAND, trace(-) coarse Sand, wet, loose	50
8	1025986	100		Top 6": Grey, fine SAND, little medium Sand, wet, loose; Bottom 18": Orange brown (iron staining), fine to medium SAND, trace(-) coarse Sand, wet, loose	0
	1025987	100		Top 20": Grey, fine SAND, trace(+) medium Sand, wet, loose; Middle 2": Grey, coarse to fine SAND, wet, loose; Bottom 2": Grey, CLAY, trace fine Sand, wet, dense	0
12				Bottom of boring at 12.2'	
16					
20					
24					

Comments: Borehole backfilled with bentonite chips upon completion.

Printed On: 1/21/1998

Boring No: SK-SB-128

LEA
LOUREIRO ENGINEERING ASSOCIATES, PC
100 Northwest Drive, Plainville, Connecticut, 06062, Phone(203)747-6181 FAX (203)747-8822

GEOLOGIC BORING LOG

Project: Add. Invest. Fire Trning Area A **LEA Comm No:** 68V7037 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 2/4/97 **End Date** 2/4/97	**Boring ID** SK-SB-129
Drilling Contractor: LEA **Drilling Method:** Geoprobe **Sampling Method:** Macro Core **Groundwater Observations:** **Depth:** NM **At:** **Hours** **Depth:** **At:** **Hours**	**Logged By:** D. Brisson **Drilling Foreman:** J. Sweeton **Drill Rig:** Geoprobe 5400 **Surface Elevation:** **Northing:** **Easting:**	

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1025988	83		Top 2": Pavement; Middle 4": Grey brown, fine to medium SAND, frozen; Bottom 14": Red brown, medium to fine SAND, some coarse Sand and Gravel, moist, loose	0
	1025989	83		Grey, fine SAND, trace(-) medium Sand, moist, loose	0
4	1025990	75		Top 10": Grey, fine SAND, moist, loose; Bottom 8": Orange, brown to grey, fine SAND, trace(+) medium Sand, moist to wet	0
	1025991	75		Orange brown, fine to medium SAND, wet, loose	1.0
8	1025992	83		Top 5": Orange brown, fine SAND, wet, loose; Bottom 15": Grey, fine SAND, trace(+) medium Sand, wet, loose	0
	1025993	83		Top 10": As above; Middle 9": Greenish grey, fine SAND, wet, loose; Bottom 1": Grey, CLAY, trace(-) fine Sand	0
12				Bottom of boring at 12.3'	
16					
20					
24					

Comments: Borehole backfilled with bentonite chips upon completion.

Printed On: 1/21/1998

Boring No. SK-SB-129

LEA
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GEOLOGIC BORING LOG

Project: South Klondike Debris Pile **LEA Comm No:** 68V7038 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 2/6/97 **End Date** 2/6/97	**Boring ID** **SK-SB-130**
Drilling Contractor: LEA **Drilling Method:** Geoprobe **Sampling Method:** Macro Core **Groundwater Observations:** **Depth:** NM **At:** **Hours** **Depth:** **At:** **Hours**	**Logged By:** D. Brisson **Drilling Foreman:** J. Sweeton **Drill Rig:** Geoprobe 5400 **Surface Elevation:** **Northing:** **Easting:**	

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1026209	83		Orange brown, fine SAND, trace(+) very fine SAND, moist, moderately dense	
	1026210	83		Top 18": As above; Bottom 2": Red brown, fine SAND, moist, loose	
4	1026211	83		Orange brown, fine SAND, trace(+) medium Sand, wet on bottom 1"	
	1026212	83		Top 18": Gray to red brown, fine SAND, some very fine Sand, wet, moderately dense; Bottom 2": Orange brown, fine SAND, wet, loose	
8	1026213	83		Top 15": Gray brown, fine SAND, trace(+) very fine Sand, wet, moderately dense; Bottom 5": Orange brown to gray brown, fine SAND, wet, loose	
	1026214	83		As above	
12	1026215	42		Gray, coarse to fine SAND, wet, loose	
		0		No recovery	
16				Bottom of boring at 16'	
20					
24					

Comments: Borehole backfilled with bentonite chips upon completion.

Printed On: 1/23/1998

Boring No: SK-SB-130

LEA
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GEOLOGIC BORING LOG

Project: South Klondike Debris Pile **LEA Comm No:** 68V7038 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 2/6/97 **End Date** 2/6/97	**Boring ID** **SK-SB-131**
Drilling Contractor: LEA **Drilling Method:** Geoprobe **Sampling Method:** Macro Core **Groundwater Observations:** **Depth:** NM **At:** **Hours** **Depth:** **At:** **Hours**	**Logged By:** D. Brisson **Drilling Foreman:** J. Sweeton **Drill Rig:** Geoprobe 5400 **Surface Elevation:** **Northing:** **Easting:**	

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1026216 1026217	83		Orange brown, fine to very fine SAND, trace Silt, moist, moderately dense	
	1026218	83		Orange brown to red brown, medium to fine SAND, trace coarse Sand, moist, loose	
4	1026219	83		Top 10": As above, Bottom 10": Red brown to orange brown, fine to very fine SAND, moist to wet	
	1026220	83		Top 16": As above bottom 10"; Bottom 4": Orange brown, fine SAND, little medium Sand, wet, loose	
8	1026221	83		Orange brown to red brown, fine SAND, little very fine Sand, wet, moderately dense	
	1026222	83		As above	
12	1026223	83		Gray brown, fine to medium SAND, trace(-) coarse Sand, wet, loose	
	1026224	83		As above	
16				Bottom of boring at 16'	
20					
24					

Comments: Borehole backfilled with bentonite chips upon completion.

LEA
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GEOLOGIC BORING LOG

Project: Linde Area Add. Inv. UST **LEA Comm No:** 68V7054 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 03/26/97 **End Date** 03/26/97	**Boring ID** **SK-SB-138**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1630860	75		Top 6": Brown, fine SAND, trace organic matter, trace fine to coarse Gravel (process stone), dry, loose; Bottom 12": Reddish brown, medium to fine SAND, little coarse Sand, trace fine Gravel, dry, loose	
	1630861			Same as above last 12": moist at 16", Granite Cobble at 3"	
4	1630862	83		Top 5": Grey, very fine to fine SAND, moist, loose; Bottom 15": Greyish brown, fine to very fine SAND grading to fine SAND, wet, loose, wet at 8"	
	1630863 1630864			Greyish brown, fine to medium SAND, wet, loose	
8	1630865	67		Yellowish brown, fine to medium SAND, wet, loose	
	1630866			Top 6": Olive grey, fine to medium SAND, wet, loose; Bottom 10": Olive grey, fine SAND, wet, loose	
12	1630867	75		Olive grey, fine to medium SAND, wet, loose	
	1630868			Top 9": Yellowish brown to grey, medium SAND, trace coarse Sand, wet, loose; Bottom 9": Grey, varved CLAY, wet, loose	
16				Bottom of Boring at 16'	
20					
24					

Comments: Boring backfilled with bentonite chips

Printed On: 2/9/1998

Boring No: SK-SB-138

LEA
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GEOLOGIC BORING LOG

Project: Linde Area Add. Inv. UST **LEA Comm No:** 68V7054 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 03/26/97 **End Date** 03/26/97	**Boring ID** **SK-SB-139**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1630869	79		Top 5": Dark brown, fine SAND, trace Silt, trace organic matter, moist, loose; Bottom 14": Reddish brown, medium to fine SAND, trace coarse Sand, trace fine Gravel, dry, loose, Cobble at bottom	
	1630870			Top 8": Same as above last 14", dense; Middle 4": Greyish brown, fine SAND, moist, dense; Bottom 7": Same as top 8": dense	
4	1630871	88		Top 10": Greyish brown, fine to very fine SAND, wet, loose; Bottom 11": Greyish brown, fine SAND, wet, loose, wet at top	
	1630872			Greyish brown, fine to medium SAND, wet, loose	
8	1630873	71		Olive grey, fine to medium SAND, wet, loose	
	1630874			Top 8": As Above; Bottom 9": Olive grey, fine SAND, wet, loose	
12	1630875	83		Olive grey, fine SAND, little medium Sand, wet, loose	
	1630876			Grey, varved CLAY, wet, loose	
16				Bottom of Boring at 16'	
20					
24					

Comments: Boring backfilled with bentonite chips

Printed On: 2/9/1998

Boring No -SB-139

LEA
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GEOLOGIC BORING LOG

Project: Linde Area Add. Inv. UST **LEA Comm No:** 68V7054 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 03/27/97 **End Date** 03/27/97	**Boring ID** SK-SB-140

Drilling Contractor: LEA
Drilling Method: Direct Push
Sampling Method: Macro Core
Groundwater Observations:
Depth: 4.2 **At:** 0 **Hours**
Depth: **At:** **Hours**

Logged By: F. Postma
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1630885	70		Brownish red, medium SAND, little coarse Sand, trace fine Gravel, little fine Sand, moist, moderately dense	1.1
	1630886	70		Red, coarse SAND, little fine Gravel, little medium Sand, trace(+) coarse Gravel, dense, moist, rounded clasts	0.4
4 ▽	1630887	80		Weak red, fine SAND, little medium Sand, loose, moist to wet	0.7
	1630888	80		As Above	0.3
8	1630889	50		As Above	0.6
	1630890	50		As Above	0.4
12	1630891	90		As Above	1.7
	1630892	90		Weak reddish grey, SILT, trace(-) fine Sand, some Clay, loose, moist to wet, rhymites (stratified), fine Sand lenses	41
16				Bottom of Boring at 16'	
20					
24					

Comments:

Printed On: 2/9/1998

Boring No: SK-SB-140

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100 Northwest Drive, Plainville, Connecticut, 06062, Phone(203)747-6181 FAX (203)747-8822

GEOLOGIC BORING LOG

Project: Linde Area Add. Inv. UST **LEA Comm No:** 68V7054 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 03/27/97 **End Date** 03/27/97	**Boring ID** **SK-SB-141**

Drilling Contractor: LEA
Drilling Method: Direct Push
Sampling Method: Macro Core
Groundwater Observations:
Depth: 4.5 **At:** 0 **Hours**
Depth: **At:** **Hours**

Logged By: F. Postma
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1630893	50		Red, medium SAND, little coarse Sand, little fine Gravel, little fine Sand, loose, moist	0.5
	1630894	50		Red, medium SAND, some fine Sand, trace coarse Sand, loose, moist	1.0
4 ▽	1630895	80		Weak red, fine SAND, little medium Sand, loose, moist to wet, (fine Sandy Silt lense at 4.2-4.3')	1.0
	1630896	80		As Above, wet	0.8
8	1630897	75		As Above	0.8
	1630898	75		As Above	0.4
12	1630899	80		As Above	0.5
	1630900	80		Top 2": As Above; Bottom 9": Weak reddish grey, SILT, trace fine Sand, some Clay, loose, wet, rhymites (stratified) fine Sand lesnes	55
16				Bottom of Boring at 16'	
20					
24					

Comments:

Printed On: 2/9/1998

Boring N SK-SB-141

LEA
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GEOLOGIC BORING LOG

Project: Linde Area Add. Inv. UST **LEA Comm No:** 68V7054 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 03/27/97 **End Date** 03/27/97	**Boring ID** **SK-SB-142**

Drilling Contractor: LEA
Drilling Method: Direct Push
Sampling Method: Macro Core
Groundwater Observations:
Depth: 4 **At:** 0 **Hours** ▽
Depth: **At:** **Hours** ▽

Logged By: F. Postma
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1630901	70		Red to brownish red, medium SAND, some coarse Sand, little fine Sand, trace(+) fine Gravel, moderately dense, moist	0.7
	1630902	70		As Above	1.8
4 ▽	1630903	100		Weak read, fine SAND, little medium Sand, loose, wet	6.3
	1630904	100		As Above	2.1
8	1630905	60		Reddish grey, fine SAND, little medium Sand, loose, wet	1.4
	1630906	60		As Above	1.8
12	1630907	90		As Above	2.8
	1630908	90		Pinkish grey, SILT, some Clay, trace fine Sand, loose, wet, rhymites (stratified), fine Sand lenses	42
16				Bottom of Boring at 16'	
20					
24					

Comments:

Printed On: 2/9/1998

Boring No: SK-SB-142

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GEOLOGIC BORING LOG

Project: Linde Area Add. Inv. UST **LEA Comm No:** 68V7054 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 03/31/97 **End Date** 03/31/97	**Boring ID** **SK-SB-143**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1630877	62		Light reddish brown, fine to medium SAND, trace coarse Sand, trace fine Gravel, trace organic matter, dry, loose	0
	1630930	62		Reddish brown, fine to medium SAND, trace coarse Sand, trace fine Gravel, moist, moderately dense	0.2
4	1630931	83		Top 6": Reddish brown, fine SAND, moist, loose; Bottom 14": Greyish brown, fine SAND, trace very fine Sand, wet, loose, wet at 7"	0
	1631038	83		Top 6": Same as above last 14": Bottom 14": Greyish brown, fine to medium SAND, wet, loose	0
8	1631039	71		Greyish brown, fine SAND grading to medium to fine SAND, wet, loose	0.2
	1631040 1631041	71		Top 6": Greyish brown, medium to fine SAND, wet, loose; Bottom 11": Greyish brown to olive grey, fine SAND, wet, loose	1.2
12	1631042	83		Olive grey, medium to fine SAND, trace coarse Sand, wet, loose	2.0
	1631043	83		Top 4": As Above; Bottom 16": Grey, varved CLAY, wet, loose	50.0
16				Bottom of Boring at 16'	
20					
24					

Comments: Boring backfilled with bentonite

LEA
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100 Northwest Drive, Plainville, Connecticut, 06062, Phone(203)747-6181 FAX (203)747-8822

GEOLOGIC BORING LOG

Project: Linde Area Add. Inv. UST
LEA Comm No: 68V7054
Client: Pratt & Whitney
Location: East Hartford, CT

Start Date 03/31/97
End Date 03/31/97

Boring ID SK-SB-144

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1631044	75		Top 4.5": Concrete; Reddish brown, fine to medium SAND, trace coarse Sand, trace fine and coarse Gravel, dry, moderately dense	0
	1631045	75		As Above, moist, moderately dense	0
4	1631046	88		Top 5": Grey, fine to very fine SAND, moist, loose; Bottom 16": Yellowish brown, fine SAND, wet, loose, wet at 6"	0.2
	1631047	88		Top 3": Same as above bottom 16"; Middle 2": Grey, very fine SAND, wet, loose; Next 8": Greyish brown, fine to medium SAND, wet, loose; Bottom 8": Grey, fine to very fine SAND, wet, loose	0.2
8	1631048	62		Top 5": Yellowish brown, fine SAND, wet, loose; Bottom 10": Yellowish brown, fine SAND, trace medium Sand, wet, loose	0.2
	1631049	62		Top 9": Same as above last 10"; Bottom 6": Olive grey, fine SAND, wet, loose	0.4
12	1631050	75		Top 15": Greyish brown, fine to medium SAND; Bottom 3": Greyish brown, medium to coarse SAND, wet, loose	4.0
	1631051	75		Grey, varved CLAY, wet, loose	20.0
16				Bottom of Boring at 16'	
20					
24					

Comments: Boring backfilled with bentonite

Printed On: 2/13/1998

Boring No: SK-SB-144

LEA
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GEOLOGIC BORING LOG

Project: Linde Add Inv Gas/Chem Bld **LEA Comm No:** 68V7052 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04-02-97 **End Date** 04-02-97	**Boring ID** **SK-SB-145**

Drilling Contractor: LEA
Drilling Method: GeoProbe
Sampling Method: MC
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: J. Klapheke
Drilling Foreman: D. Brisson
Drill Rig: GeoProbe
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1630749	43		2": Asphalt, punched, no recovery	2.2
	1630750			Dark reddish-brown, fine to coarse GRAVEL, some fine to coarse SAND, wet, loose, trace Silt, subrounded	1.8
4	1630751	79		2": Dark yellowish-brown, fine to medium SAND, wet, slightly dense, 2": Dark greenish-brown, fine SAND and SILT, moist, dense; 34": Dark yellowish-brown, fine to coarse SAND, trace fine Gravel, moist to wet, loose	2.8
	1630752				4.0
	1630753				
8	1630754	77		Dark yellowish-brown, fine to medium SAND, wet, loose, coarsening downward to dark yellowish-brown, fine GRAVEL and coarse SAND, wet, loose	1.6
	1630755				2.0
12	1630756	100		6": Dark yellowish-brown, fine GRAVEL with fine to coarse Sand, wet, loose; 42": Oliver-grey, CLAY and SILT, trace fine Sand, wet, dense, laminated	2.5
	1630757				2.6
16				Bottom of Boring 16'	
20					
24					

Comments: Boring backfilled with bentonite chips.

Printed On: 2/9/1998

Boring N K-SB-145

LEA
LOUREIRO ENGINEERING ASSOCIATES, PC
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GEOLOGIC BORING LOG

Project: Linde Add Inv Gas/Chem Bld **LEA Comm No:** 68V7052 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04-02-97 **End Date** 04-02-97	**Boring ID** **SK-SB-146**

Drilling Contractor: LEA
Drilling Method: GeoProbe
Sampling Method: MC
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: J. Klapheke
Drilling Foreman: D. Brisson
Drill Rig: GeoProbe
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1630758	67		6": Olive-grey, fine GRAVEL, some fine to coarse Sand, wet, loose; 26" : Dark reddish-brown, fine to coarse GRAVEL and fine to coarse SAND, trace Silt, moist to wet, loose, occasional concrete fragments	0.2
	1630759				0.3
4	1630760	83		6": Olive-grey, fine SAND and SILT, moist, dense; 10": Dark yellowish-brown, fine to medium SAND, little Silt, dense, wet; 24": Dark reddish-brown, fine to coarse SAND, little Silt, moist to wet, slightly dense, occasional Silt lense, olive-grey, moist, dense	1.0
	1630761				1.8
8	1630762	12		Dark greyish-brown, fine to coarse SAND, trace fine Gravel, wet, loose	
	1630763				
12	1630764	100		12": Dark yellowish-brown, fine to coarse SAND and fine GRAVEL, wet, loose, grading to dark grey at bottom 2" ±; 36": Olive-grey, CLAY and SILT, trace fine Sand, wet, dense, laminated	
	1630765				
16				Bottom of Boring 16'	
20					
24					

Comments: Boring backfilled with bentonite chips.

Printed On: 2/9/1998

Boring No: SK-SB-146

LEA
LOUREIRO ENGINEERING ASSOCIATES, PC
100 Northwest Drive, Plainville, Connecticut, 06062, Phone(203)747-6181 FAX (203)747-8822

GEOLOGIC BORING LOG

DRAFT

Project: Linde Add Inv Gas/Chem Bld **LEA Comm No:** 68V7052 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04-03-97 **End Date** 04-03-97	**Boring ID** SK-SB-147

Drilling Contractor: LEA
Drilling Method: GeoProbe
Sampling Method: MC
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: J. Klapheke
Drilling Foreman: D. Brisson
Drill Rig: GeoProbe
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1630766	77		6": Topsoil; 10": Dark yellowish-brown, fine to medium SAND with Silt, moist, slightly dense, rooted; 21": Dark reddish- brown, fine to coarse GRAVEL with fine to coarse Sand, trace Silt, moist to wet, loose to slightly dense, subrounded Gravel	2.1
	1630767 1630768				1.6
4	1630769	62		As Above, wet, subangular to subrounded GRAVEL	2.0
	1630770				1.9
8	1630771	69		10": Dark yellowish-brown, coarse SAND, little fine Gravel, wet, loose; 13": Dark yellowish-brown, fine(+) to medium SAND, wet, loose; 10": Dark yellowish-brown, fine GRAVEL and coarse SAND, wet, loose	1.8
	1630772				1.8
12	1630773	83		10": As Above; 30": Olive-grey CLAY,some Silt, trace fine Sand, wet, dense, thinly laminated	1.5
	1630774				1.6
16				Bottom of Boring 16'	
20					
24					

Comments: Boring backfilled with bentonite chips.

Printed On: 2/9/1998

Boring N. K-SB-147

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GEOLOGIC BORING LOG

Project: Linde Add Inv Gas/Chem Bld **LEA Comm No:** 68V7052 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04-03-97 **End Date** 04-03-97	**Boring ID** SK-SB-148

Drilling Contractor: LEA
Drilling Method: GeoProbe
Sampling Method: MC
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: J. Klapheke
Drilling Foreman: D. Brisson
Drill Rig: GeoProbe
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1630776	75		6": Topsoil; 30": Dark reddish-brown, fine(+) to coarse GRAVEL with fine to coarse(+) Sand, trace Silt, wet, dense	1.6
	1630777				5.3
4	1630778	94		Olive-grey to dark reddish-brown, fine to coarse SAND, trace Silt, occasional Silt lense, wet, slightly dense, thinly bedded	2.2
	1630779				1.3
8	1630780	77		20": Dark yellowish-brown, fine SAND, wet, slightly dense; 17": Dark yellow-brown, fine to coarse(+) Sand, wet, slightly dense	1.9
	1630781				1.9
12	1630782	75		10": As Above; 26": Olive-grey, CLAY, some Silt, trace fine Sand, wet, dense	1.2
	1630783				0.7
16				Bottom of Boring 16'	
20					
24					

Comments: Boring backfilled with bentonite chips.

Printed On: 2/9/1998

Boring No: SK-SB-148

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GEOLOGIC BORING LOG

Project: Linde Add Inv Gas/Chem Bld **LEA Comm No:** 68V7052 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04-03-97 **End Date** 04-03-97	**Boring ID** **SK-SB-149**

Drilling Contractor: LEA
Drilling Method: GeoProbe
Sampling Method: MC
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: J. Klapheke
Drilling Foreman: D. Brisson
Drill Rig: GeoProbe
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1630784	75		8": Dark brown, fine to medium SAND, some Silt, wet, rooted; 10": Dark reddish-brown, fine to coarse SAND, some Silt, moist, loose; 18": Dark reddish-brown, fine to coarse(+) GRAVEL with fine to coarse Sand, moist to wet, dense	0.0
	1630785				0.0
4	1630786	88		8": Dark reddish-brown SILT, with fine Sand, moist, very dense; 12": Grey, fine SAND, wet, slightly dense; 22": Dark reddish-brown, fine to coarse SAND, wet, loose, coarsening downward	0.0
	1630787				0.0
8	1630788	62		Dark yellowish-brown, fine to coarse SAND, trace Silt, wet, loose	0.0
	1630789				0.0
12	1630790	90		12": Dark yellowish-brown, fine to coarse(+) SAND and fine GRAVEL, wet, loose; 31": Olive-grey, CLAY, little Silt, trace fine Sand, wet, dense, thinly laminated	0.4
	1630791				0.0
16				Bottom of Boring 16'	
20					
24					

Comments: Boring backfilled with bentonite chips.

Printed On: 2/9/1998

Boring N

SK-SB-149

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GEOLOGIC BORING LOG

Project: Linde Add Inv Gas/Chem Bld **LEA Comm No:** 68V7052 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04-03-97 **End Date** 04-03-97	**Boring ID** SK-SB-150

Drilling Contractor: LEA
Drilling Method: GeoProbe
Sampling Method: MC
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: J. Klapheke
Drilling Foreman: D. Brisson
Drill Rig: GeoProbe
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1630792	81		Dark yellowish-brown, to dark reddish-brown, fine to coarse SAND, moist to wet, loose to slightly dense	0.0
	1630793				0.0
4	1630794	83		Dark yellowish-brown to dark reddish-brown, fine to coarse SAND, little Silt, wet, slightly dense, slight petrol odor(?)	0.0
	1630795				20.6
8	1630796	83		Dark yellowish-brown, fine to coarse SAND, some fine Gravel, wet, slightly dense, occasional iron-staining, generally coarsening downward	0.0
	1630797				0.0
12	1630798	75		12": Dark yellowish-brown, fine GRAVEL and fine to coarse(+) SAND, wet, loose, generally fining downward; 24": Olive-grey, CLAY, some Silt, trace fine Sand, wet, dense, thinly laminated	0.0
	1630799				0.0
16				Bottom of Boring 16'	
20					
24					

Comments: Boring backfilled with bentonite chips.

Printed On: 2/9/1998

Boring No: SK-SB-150

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GEOLOGIC BORING LOG

Project: Linde Add Inv Gas/Chem Bld **LEA Comm No:** 68V7052 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04-03-97 **End Date** 04-03-97	**Boring ID** **SK-SB-151**

Drilling Contractor: LEA
Drilling Method: GeoProbe
Sampling Method: MC
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: J. Klapheke
Drilling Foreman: D. Brisson
Drill Rig: GeoProbe
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1630800	83		Dark reddish-brown, fine(+) to coarse SAND, little Silt, moist to wet, loose	0.0
	1630801				0.0
4	1630802	88		6": Dark olive-grey, SILT with fine Sand, moist, very dense; 36": Dark reddish-brown, fine SAND and SILT, trace medium to coarse Sand, wet, slightly dense, occasional Silt lenses	0.0
	1630803				0.0
8	1630804	71		Dark yellowish-brown, fine to coarse SAND, wet, slightly dense, approximately 6" corsening down beds	0.0
	1630805				0.0
12	1630806	75		18": Dark yellowish-brown, fine GRAVEL with fine to coarse(+) Sand, wet, loose; 18": Olive-grey, CLAY, some Silt, trace fine Sand, moist, very dense	0.0
	1630807				0.0
16				Bottom of Boring 16'	
20					
24					

Comments: Boring backfilled with bentonite chips.

Printed On: 2/9/1998

Boring No. K-SB-151

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GEOLOGIC BORING LOG

Project: Linde Add Inv Gas/Chem Bld **LEA Comm No:** 68V7052 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04-03-97 **End Date** 04-03-97	**Boring ID** SK-SB-152

Drilling Contractor: LEA
Drilling Method: GeoProbe
Sampling Method: MC
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: J. Klapheke
Drilling Foreman: D. Brisson
Drill Rig: GeoProbe
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1630808	71		2": Asphalt; 2": Subbase; 30": Dark reddish-brown, fine(+) to coarse SAND and fine GRAVEL, with Silt, wet, dense	0.0
	1630809				0.0
4	1630810	75		Dark reddish-brown, fine to coarse GRAVEL with fine to coarse(+) Sand, wet, loose, occasional grey to black lenses, 6" of concrete rubble at 1', strong petrol odor	63.8
	1630811				60.6
8	1630812	77		18": Grey-brown, fine SAND, trace Silt, wet, slightly dense, slight petrol odor; 19": Dark yellowish-brown, fine to coarse(+) SAND, trace fine Gravel, wet, slightly dense, occasional iron-staining	0.0
	1630813				0.0
12	1630814	92		18": Dark yellowish-brown, fine GRAVEL and fine to coarse(+) SAND, wet, loose; 26": Olive-grey, CLAY, little Silt, trace fine Sand, wet, dense	0.0
	1630815				0.0
16				Bottom of Boring 16'	
20					
24					

Comments: Boring backfilled with bentonite chips.

Printed On: 2/9/1998

Boring No: SK-SB-152

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GEOLOGIC BORING LOG

Project: Linde Add Inv Gas/Chem Bld **LEA Comm No:** 68V7052 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04-04-97 **End Date** 04-04-97	**Boring ID** **SK-SB-153**

Drilling Contractor: LEA
Drilling Method: GeoProbe
Sampling Method: MC
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Klapheke
Drilling Foreman: D. Brisson
Drill Rig: GeoProbe
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1630818	91		4": Concrete - cored; 4": Dark red, coarse GRAVEL, dry, loose; 36": Dark yellow-brown, fine to medium SAND, trace fine Gravel, dry to moist, loose, occasional coal(?) fragments	0.0
	1630819				0.0
4	1630820	88		Dark reddish-brown, fine to coarse(+) GRAVEL with fine(+) to coarse Sand, little Silt, wet, extremely dense	0.0
	1630821 1630822				0.0
8	1630823	83		12": Dark reddish-brown, fine to coarse GRAVEL with fine to coarse Sand, little Silt, wet, slightly dense; 4": Grey, fine SAND, wet, slightly dense; 24": Dark yellow-brown, fine to coarse SAND, trace fine Gravel, wet, loose, generally coarsens downward	0.1
	1630824				1.0
12				Bottom of Boring 12'	
16					
20					
24					

Comments: Boring backfilled with bentonite chips.

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GEOLOGIC BORING LOG

Project: Linde Add Inv Gas/Chem Bld **LEA Comm No:** 68V7052 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04-04-97 **End Date** 04-04-97	**Boring ID** **SK-SB-154**

Drilling Contractor: LEA
Drilling Method: GeoProbe
Sampling Method: MC
Groundwater Observations:
Depth: **At:** **Hours**
Depth: **At:** **Hours**

Logged By: J. Klapheke
Drilling Foreman: D. Brisson
Drill Rig: GeoProbe
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1630825	98		4": Concrete, cored; Brown to dark yellow-brown, fine(+) to coarse SAND, trace fine Gravel, moist to wet at base, occasional coal (?) fragments, loose	0.0
	1630826				0.0
4	1630827	85		8": Grey, medium to coarse SAND, wet, loose, occational Silt lenses, 33": Dark reddish-brown, fine to coarse GRAVEL and fine to coarse SAND, little Silt, wet, extremely dense,	0.0
	1630828			petrol odor(?)	10.4
8	1630829	75		Dark grey to reddish-brown, fine(+) to medium SAND with SILT, wet, slightly dense, occasional Silt lenses	0.0
	1630830				0.0
12				Bottom of Boring 12'	
16					
20					
24					

Comments: Boring backfilled with bentonite chips.

Printed On: 2/2/1998

Boring No: SK-SB-154

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GEOLOGIC BORING LOG

Project: Linde Add Inv Gas/Chem Bld **LEA Comm No:** 68V7052 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04-04-97 **End Date** 04-04-97	**Boring ID** **SK-SB-155**

Drilling Contractor: LEA
Drilling Method: GeoProbe
Sampling Method: MC
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Klapheke
Drilling Foreman: D. Brisson
Drill Rig: GeoProbe
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1630832	100		4": Concrete, cored; Dark brown to dark reddish-brown, fine(+) to coarse SAND and fine to coarse(+) GRAVEL, trace Silt, dry to wet at tip, dense, angular, brick and concrete and asphalt fragments	0.0
	1630833				0.0
4	1630834	92		Dark reddish-brown, fine to coarse GRAVEL with fine(+) to coarse SAND, wet, dense, subangular to subrounded	0.0
	1630835				0.0
8	1630836	81		Dark yellow-brown, fine to coarse SAND, trace (-) fine Gravel, wet, loose, occasional Silt lenses, slight petrol odor	0.0
	1630837				0.0
12				Bottom of Boring 12'	
16					
20					
24					

Comments: Boring backfilled with bentonite chips

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Boring N K-SB-155

GEOLOGIC BORING LOG

Project: Linde Add Inv Gas/Chem Bld **LEA Comm No:** 68V7052 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04-08-97 **End Date** 04-08-97	**Boring ID** SK-SB-156

Drilling Contractor: LEA
Drilling Method: GeoProbe
Sampling Method: MC
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: GeoProbe
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1631398	67		Top 8": Reddish-brown, fine to medium SAND, trace fine Gravel, dry, loose; Bottom 8": Light yellowish-brown, fine SAND, trace medium Sand, dry, loose	0.6
	1631399	67		Same as bottom 8", moist	0.5
4	1631400	71		Top 6": As Above, wet at 6"; Bottom 11": Reddish-brown, medium to fine SAND, trace coarse Sand, trace fine Gravel, moist, medium dense	0.2
	1631401	71		Reddish-brown, fine to medium SAND, little coarse Gravel, trace fine Gravel, moist, medium dense	0.2
8	1631402	71		Reddish-brown, medium to fine SAND, trace fine Gravel, trace fine Sand, trace coarse Sand, moist, medium dense, slight pine odor	0.1
	1631404	71		Top 9": As Above, wet; Bottom 8": Greyish-brown, fine to medium SAND, wet, loose, process stone in bottom	0.0
12					
16					
20					
24					

Comments: Boring backfilled with bentonite chips.

Printed On: 2/2/1998

Boring No: SK-SB-156

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GEOLOGIC BORING LOG

Project: Linde Add Inv Gas/Chem Bld **LEA Comm No:** 68V7052 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04-08-97 **End Date** 04-08-97	**Boring ID** **SK-SB-157**

Drilling Contractor: LEA
Drilling Method: GeoProbe
Sampling Method: MC
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: GeoProbe
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1631405	50		Top 5": Black, bituminous asphalt; Bottom 7": Reddish-brown, medium to fine SAND, trace coarse Sand, trace fine Gravel, moist, medium dense	0.0
	1631406	50		Same as last 7", COBBLE at 8"	0.0
4	1631407	92		As Above, COBBLE at 16'	0.0
	1631408	92		Top 15": As Above, wet at 13"; Bottom 7": Greyish-brown, fine SAND, wet, loose, strong petrol odor in Bottom 7"	8.5
8	1631409	75		Greyish-brown, fine to very fine SAND, wet, loose	0.0
	1631410	75		Olive-grey, fine to medium SAND, wet, loose	0.0
12	1631411	100		Top 12": Olive-grey, fine SAND, wet, loose; Bottom 12": Grey, varved CLAY, wet, loose	0.0
	1631412	100		Same as last 12"	0.0
16				Bottom of Boring 16'	
20					
24					

Comments: Boring backfilled with bentonite chips.

Printed On: 2/2/1998

Boring N K-SB-157

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GEOLOGIC BORING LOG

Project: Cryogenics Area Add. Inv. **LEA Comm No:** 68V7055 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04-08-97 **End Date** 04-08-97	**Boring ID** **SK-SB-158**

Drilling Contractor: LEA
Drilling Method: GeoProbe
Sampling Method: MC
Groundwater Observations:
Depth: NM **At:** **Hours** ▽
Depth: **At:** **Hours** ▼

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: GeoProbe
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1631413	67		Top 2": Organic debris; Bottom 14": Light yellowish-brown, fine SAND, dry, loose	0.0
	1631415	67		Top 8": Same as last 14"; Bottom 8": Brown, fine to medium SAND, moist, loose	0.0
4	1631416	83		Top 8": Brown, fine SAND, wet, loose; Bottom 12": Yellowish brown, fine SAND, wet, loose	0.0
	1631417	83		Top 8": Same as last 12": Middle 4", Grey, SILT, wet, moderately dense; Bottom 8": Brown, fine SAND, wet, loose	0.0
8	1631418	83		Greyish-brown, fine SAND, wet, loose	0.0
	1631419	83		Top 5": Greyish-brown, fine to very fine SAND, wet, loose; Bottom 15": Yellowish-brown, medium to fine SAND, wet, loose	0.0
12	1631420	88		Olive-brown, fine to very fine SAND, wet, loose	0.0
	1631321	88		Top 6": As Above; Middle 7": Yellowish-brown, medium SAND, trace coarse Sand, wet, loose; Bottom 8": Grey, varved CLAY, wet, loose	0.0
16				Bottom of Boring 16'	
20					
24					

Comments: Boring backfilled with bentonite chips

Printed On: 2/9/1998

Boring No: SK-SB-158

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GEOLOGIC BORING LOG

Project: Cryogenics Area Add. Inv. **LEA Comm No:** 68V7055 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04-08-97 **End Date** 04-08-97	**Boring ID** **SK-SB-159**

Drilling Contractor: LEA
Drilling Method: GeoProbe
Sampling Method: MC
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: GeoProbe
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1631422	71		Drilled through 8" Concrete; Top 5": Black, bituminous asphalt; Bottom 12": Yellowish-brown, fine SAND, moist, loose	0.0
	1631423	71		As Above last 12"	0.0
4	1631424	75		As Above, 1/4" Grey, SILT layer at 12", wet at bottom	0.0
	1631425	75		Greyish-brown, fine SAND, wet, loose	0.0
8	1631426	83		As Above	0.0
	1631427	83		Yellowish-brown, fine to medium SAND, wet, loose	0.0
12	1631428	100		Top 4": As Above; Middle 8": Yellowish-brown, fine SAND, wet, loose; Bottom 12": Yellowish-brown, fine to medium SAND, wet, loose	0.0
	1631429	100		Top 6": As Above last 1"; Bottom 1.5': Grey, varved CLAY, wet, loose	0.0
16				Bottom of Boring 16'	
20					
24					

Comments: Boring backfilled with bentonite chips

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100 Northwest Drive, Plainville, Connecticut, 06062, Phone(203)747-6181 FAX (203)747-8822

GEOLOGIC BORING LOG

Project: Cryogenics Area Add. Inv. **LEA Comm No:** 68V7055 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04-09-97 **End Date** 04-09-97	**Boring ID** **SK-SB-160**

Drilling Contractor: LEA
Drilling Method: GeoProbe
Sampling Method: MC
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: GeoProbe
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1631432	83		Top 6": Dark brown, fine SAND, trace Silt, trace organic matter, Clay, loose; Bottom 14": Reddish-brown, fine to medium SAND, trace fine to coarse Gravel, dry, loose	0
	1631433	83		Yellowish-brown, fine SAND, moist, loose	0
4	1631435 1631434	83		Greyish-brown, fine SAND, moist, loose	0
	1631436	83		Top 12": Yellowish-brown, fine SAND; Middle 2": Grey, SILT, moist, loose; Bottom 6": Greyish-brown, fine to medium SAND, wet at bottom	0
8	1631437	83		Top 12": Yellowish-brown, fine to medium SAND, wet, loose; Bottom 8": Greyish-brown, fine SAND, wet, loose	0
	1631438	83		Top 4": Same as last 8"; Bottom 16": Greyish-brown to olive-brown, fine to medium SAND, wet, loose	0
12	1631439	75		Olive-brown, fine to very fine SAND, wet, loose	0
	1631440	75		Top 3": As Above; Middle 8": Yellowish-brown, medium to fine SAND, trace(+) coarse Sand, wet, loose; Bottom 7": Grey, varved CLAY, wet, loose	0
16				Bottom of Boring 16'	
20					
24					

Comments: Boring backfilled with bentonite chips

Printed On: 2/9/1998

Boring No: SK-SB-160

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GEOLOGIC BORING LOG

Project: Cryogenics Area Add. Inv. **LEA Comm No:** 68V7055 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04-09-97 **End Date** 04-09-97	**Boring ID** **SK-SB-161**

Drilling Contractor: LEA
Drilling Method: GeoProbe
Sampling Method: MC
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: GeoProbe
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1631441	62		Top 8": Concrete; Bottom 7": Light brown, fine SAND, dry, loose	0
	1631442	62		Yellowish-brown, fine SAND, moist, loose	0
4	1631443	71		Top 14": Greyish-brown, fine to medium SAND, moist; Bottom 3": Greyish-brown, fine SAND, trace very fine Sand, loose, wet at 12"	0
	1631444	71		Top 4": As Above last 3"; Middle 3": Grey, SILT, wet, loose; Bottom 10": Greyish-brown, fine SAND, grading to fine to medium Sand, wet, loose	0
8	1631445	83		Greyish-brown, fine SAND, trace(-) medium Sand, wet, loose	0
	1631446	83		Top 10": Greyish-brown, fine SAND, moist, loose; Middle 6": Greyish-brown, fine to medium SAND, wet, loose; Bottom 4": Same as top 10"	0
12	1631447	79		Top 10": Olive-brown, fine SAND, trace very fine Sand, wet, loose; Bottom 9": Yellowish-brown, fine to medium SAND, wet, loose	0
	1631448	79		Top 6": As Above last 9"; Middle 7": Yellowish-brown, medium to fine SAND, trace coarse Sand, wet, loose; Bottom 6": Grey, varved CLAY, wet, loose	0
16				Bottom of Boring 16'	
20					
24					

Comments: Boring backfilled with bentonite chips

Printed On: 2/9/1998

Boring N

-SB-161

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GEOLOGIC BORING LOG

Project: Cryogenics Area Add. Inv. **LEA Comm No:** 68V7055 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04-09-97 **End Date** 04-09-97	**Boring ID** **SK-SB-162**

Drilling Contractor: LEA
Drilling Method: GeoProbe
Sampling Method: MC
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: GeoProbe
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1631449	83		Top 6": Dark brown, fine SAND, some Silt, trace organic matter, dry, loose; Bottom 14": Light brown, fine SAND, trace organic matter, dry, loose	0
	1631450	83		Top 3": As Above last 14"; Middle 3": Grey, SILT, moist, dense; Bottom 14": Yellowish-brown, fine SAND, trace(-) medium Sand, moist, loose	0
4	1631451	79		Greyish-brown, fine SAND, moist, loose, wet at 10"	0
	1631452	79		Top 6": Yellowish-brown, fine to very fine SAND; Middle 3": Grey, SILT, wet, moderately dense; Bottom 10": Same as top 6"	0
8	1631453	71		Greyish-brown, fine SAND, wet, loose	0
	1631454	71		As Above	0
12	1631455	100		Olive-brown, fine to very fine SAND, grading to yellowish-brown, fine to medium Sand, wet, loose	0
	1631456	100		Top 14": Yellowish-brown, medium to fine SAND, trace coarse Sand, wet, loose; Bottom 10": Grey, varved CLAY, wet, loose	0
16				Bottom of Boring 16'	
20					
24					

Comments: Boring backfilled with bentonite chips

Printed On: 2/9/1998

Boring No: SK-SB-162

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GEOLOGIC BORING LOG

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Project: Cryogenics Area Add. Inv. **LEA Comm No:** 68V7055 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04-09-97 **End Date** 04-09-97	**Boring ID** **SK-SB-163**

Drilling Contractor: LEA
Drilling Method: GeoProbe
Sampling Method: MC
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: GeoProbe
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1631457	67		Top 2": Organic debris; Next 2": Concrete; Next 2": Dark brown, fine SAND, dry, loose; Next 2": Grey, SILT, dry, loose; Bottom 8": Reddish-brown, fine to medium SAND, dry, loose	0.1
	1631458	67		Light yellowish-brown, fine SAND, trace(-) medium Sand, loose, moderately dense to 8", loose at bottom	0.4
4	1631459	92		Greyish-brown, fine SAND, trace medium Sand, moist, loose	0
	1631460	92		Top 4": Yellowish-brown, very fine SAND, moist, loose, Middle 3": Grey, SILT, moist, loose; Bottom 15": Greyish-brown, fine SAND, moist, loose, wet at 15"	0.1
8	1631461	96		Top 7": As Above last 15"; Bottom 15": Greyish-brown, fine to medium SAND, wet, loose	0.6
	1631462	96		Top 10": Greyish-brown, fine SAND, trace very fine Sand; Bottom 13": Yellowish-brown, medium to fine SAND, wet, loose	0.1
12	1631463	71		As Above last 13"	0.1
	1631464	71		Top 3": As Above; Bottom 14": Grey, varved CLAY, wet, loose	0
16				Bottom of Boring 16'	
20					
24					

Comments: Boring backfilled with bentonite chips

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Boring N

SK-SB-163

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GEOLOGIC BORING LOG

Project: Cryogenics Area Add. Inv. **LEA Comm No:** 68V7055 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04-09-97 **End Date** 04-09-97	**Boring ID** **SK-SB-164**

Drilling Contractor: LEA
Drilling Method: GeoProbe
Sampling Method: MC
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: GeoProbe
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1631465	67		Drilled through 2": Asphalt, start 6" below grade; Reddish-brown, fine SAND, trace medium Sand, trace fine to coarse Gravel, dry, loose	0.1
	1631466	67		Yellowish-brown, fine to very fine SAND, moist, loose; Black-staining first 4" of sample	0.2
4	1631467	71		Yellowish-brown, fine SAND, moist, loose	0
	1631468	71		Top 2": Yellowish-brown, fine to very fine SAND, moist, loose; Next 3": Grey, SILT, moist, moderately dense; Next 2": Same as top 2": Bottom 10": Greyish-brown, fine SAND, wet, loose	0.5
8	1631469	92		As Above last 10"	0.2
	1631470	92		As Above; trace medium SAND last 6"	0
12	1631471	75		Yellowish-brown, fine to medium SAND, wet, loose	0.2
	1631472	75		Top 12": Yellowish-brown, medium to fine SAND, wet, loose; Bottom 6": Grey, varved CLAY, wet, loose	0
16				Bottom of Boring 16'	
20					
24					

Comments: Boring backfilled with bentonite chips

Printed On: 2/9/1998

Boring No: SK-SB-164

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GEOLOGIC BORING LOG

Project: Cryogenics Area Add. Inv. **LEA Comm No:** 68V7055 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04-09-97 **End Date** 04-09-97	**Boring ID** **SK-SB-165**

Drilling Contractor: LEA
Drilling Method: GeoProbe
Sampling Method: MC
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: GeoProbe
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1631473	75		Light brown, fine to very fine SAND, dry, loose; Bituminous asphalt throughout	0
	1631474	75		Yellowish-brown, fine SAND, trace very fine Sand, trace Silt, moist, loose; Bituminous asphalt throughout	0
4	1631475	83		Top 8": Yellowish-brown, fine SAND, moist, loose; Next 3": Yellowish-brown, very fine SAND, moist, loose; Next 3": Grey, SILT, moist, loose; Bottom 6": Greyish-brown, fine to very fine SAND, moist, loose	0
	1631476	83		Greyish-brown, fine SAND, wet, loose, wet at top	0
8	1631477	58		Yellowish-brown, fine to medium SAND, trace coarse Sand, wet, loose	0
	1631478	58		As Above	0
12	1631479	83		Yellowish-brown, medium SAND, trace coarse Sand, wet, loose	0
	1631480	83		Top 3": As Above; Bottom 14": Grey, varved CLAY, wet, loose	0
16				Bottom of Boring 16'	
20					
24					

Comments: Boring backfilled with bentonite chips

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GEOLOGIC BORING LOG

Project: Cryogenics Area Add. Inv. **LEA Comm No:** 68V7055 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04-09-97 **End Date** 04-09-97	**Boring ID** **SK-SB-166**

Drilling Contractor: LEA
Drilling Method: GeoProbe
Sampling Method: MC
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: J. Klapheke
Drilling Foreman: D. Brisson
Drill Rig: GeoProbe
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1631481	79		Top 4": Black bituminous asphalt; Yellowish-brown, fine to very fine SAND, little Silt, dry, loose, trace organic matter	0
	1631482	79		Top 8": As Above, moist; Bottom 11": Dark yellowish-brown, fine SAND, moist, loose	0
4	1631483	83		Top 10": Greyish-brown, fine SAND, moist, loose; ;Next 5": Grey, SILT, moist, loose; Bottom 5": Greyish-brown, very fine SAND, moist, moderately dense	0
	1631484	83		Greyish-brown, fine SAND, moist, loose, wet at bottom	0
8	1631485	83		Top 10": As Above; Bottom 10": Yellowish-brown, fine to medium SAND, wet, loose	0
	1631486	83		Same as last 10"	2.3
12	1631487	100		As Above, trace coarse SAND, wet, loose	0
	1631488	100		Grey, varved CLAY, wet, loose	0
16				Bottom of Boring 16;	
20					
24					

Comments: Boring backfilled with bentonite chips

Printed On: 2/9/1998

Boring No: SK-SB-166

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GEOLOGIC BORING LOG

Project: Cryogenics Area Add. Inv. **LEA Comm No:** 68V7055 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04-10-97 **End Date** 04-10-97	**Boring ID** **SK-SB-167**
Drilling Contractor: LEA **Drilling Method:** GeoProbe **Sampling Method:** MC **Groundwater Observations:** **Depth:** NM **At:** **Hours** ▽ **Depth:** **At:** **Hours** ▼	**Logged By:** J. Trzaski **Drilling Foreman:** D. Brisson **Drill Rig:** GeoProbe **Surface Elevation:** **Northing:** **Easting:**	

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1631490	30		5": Concrete; Dark reddish-brown, fine to medium SAND with Gravel, dry, loose (Gravel stuck in tip)	0.0
4	1631491	79		Reddish-brown, fine(+) to medium SAND, moist to wet, slightly dense, occasional Silt lense, olive-grey, wet, dense	0.0
	1631492	79			0.0
8	1631493	88		Dark yellow-brown to grey, fine to coarse SAND, wet, slightly dense, generally coarsening downward	0.0
	1631494 1631495	88			0.6
12	1631496	100		44": Greyish-brown, fine to coarse(+) SAND, some fine Gravel, wet, loose; 4": Olive-grey, CLAY, trace Silt, trace fine Sand, wet, dense	1.0
	1631497				0.0
16				Bottom of Boring 16'	
20					
24					

Comments: Boring backfilled with bentonite chips

Printed On: 2/9/1998

Boring N K-SB-167

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GEOLOGIC BORING LOG

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Project: Cryogenics Area Add. Inv.
LEA Comm No: 68V7055
Client: Pratt & Whitney
Location: East Hartford, CT

Start Date 04-10-97
End Date 04-10-97

Boring ID SK-SB-168

Drilling Contractor: LEA
Drilling Method: GeoProbe
Sampling Method: MC
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: GeoProbe
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1631499	83		6": Concrete; Dark reddish-brown, fine(+) to medium SAND, little Silt, trace fine Gravel, moist to wet (2±), slightly dense	0.0
	1631500				0.0
4	1631501	77		21": Dark reddish-brown, fine to coarse SAND, wet, slightly dense, trace Silt; 4": Olive-grey, SILT, moist, dense; 12": Dark reddish-brown, fine(+) to medium SAND, trace Silt,	0.5
	1631502			wet, slightly dense	1.4
8	1631503	85		Grey to dark reddish-brown, fine(+) to medium SAND with Silt, wet, slightly dense, coarsening downward to fine to coarse(+) Sand, little fine Gravel, wet, loose	3.5
	1631504				1.4
12	1631505	90		37": Dark yellowish-brown, fine to coarse(+) SAND, trace fine Gravel, wet, slightly dense, coarsening downward to coarse Sand and fine Gravel, wet, loose; 6": Olive-grey,	1.2
	1631506			CLAY, trace Silt, trace fine Sand, wet, dense	0.0
16				Bottom of Boring 16'	
20					
24					

Comments: Boring backfilled with bentonite chips

Printed On: 2/9/1998

Boring No: SK-SB-168

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GEOLOGIC BORING LOG

Project: Cryogenics Area Add. Inv. **LEA Comm No:** 68V7055 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04-10-97 **End Date** 04-10-97	**Boring ID** **SK-SB-169**

Drilling Contractor: LEA
Drilling Method: GeoProbe
Sampling Method: MC
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: J. Klapheke
Drilling Foreman: D. Brisson
Drill Rig: GeoProbe
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1631507	81		6": Concrete and Rubble; Greyish brown to dark yellow-brown, fine SAND with Silt, moist to wet (at 2' ±), slightly dense, occasional Silt lenses	17.5
	1631508				13.5
4	1631509	75		Grey to dark reddish-brown, fine(+) to medium SAND with Silt, wet, slightly dense	0.5
	1631510				2.8
8	1631511	79		Grey-brown to dark yellow-brown, fine to coarse SAND, trace(-) Silt, wet, loose to slightly dense	0.2
	1631512				2.0
12	1631513	100		12": Dark yellow-brown, coarse SAND with fine Gravel, wet, loose; 25": Dark yellowish-brown fine(+) to medium SAND, trace Silt, wet, slightly dense, coarsening downward to dark yellowish-brown coarse Sand and fine Gravel, wet, loose; 11": Olive-grey, CLAY, trace Silt, trace fine Sand, dense, wet	0.0
	1631514				0.0
16				Bottom of Boring 16'	
20					
24					

Comments: Boring backfilled with bentonite chips

Printed On: 2/13/1998

Boring No. SK-SB-169

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GEOLOGIC BORING LOG

Project: Cryogenics Area Add. Inv. **LEA Comm No:** 68V7055 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04-10-97 **End Date** 04-10-97	**Boring ID** **SK-SB-170**

Drilling Contractor: LEA
Drilling Method: GeoProbe
Sampling Method: MC
Groundwater Observations:
Depth: NM **At:** **Hours** ▽
Depth: **At:** **Hours** ▼

Logged By: J. Klapheke
Drilling Foreman: D. Brisson
Drill Rig: GeoProbe
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1631515	86		6": Concrete and Rubble; 26": Dark reddish-brown, fine SAND with Silt, occasional Silt lense, moist to wet (at 2' ±), slightly dense; 10": Dark yellowish-brown, fine to coarse SAND, wet, loose	0.0
	1631516				0.0
4	1631517	81		Dark brown to grey, fine(+) to medium SAND with Silt, occasional Silt lense, dense, wet	0.0
	1631518				0.0
8	1631519	79		Grey-brown to dark yellow-brown, fine to coarse SAND, occasional coarse Sand lenses, wet, loose to slightly dense, occasional iron-staining	0.0
	1631520				0.0
12	1631521	100		24": As Above; 24": Olive-grey, CLAY, trace Silt, trace fine Sand, wet, dense, laminated	0.0
	1631522				0.0
16				Bottom of Boring 16'	
20					
24					

Comments: Boring backfilled with bentonite chips

Printed On: 2/13/1998

Boring No: SK-SB-170

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GEOLOGIC BORING LOG

Project: Cryogenics Area Add. Inv. **LEA Comm No:** 68V7055 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04-11-97 **End Date** 04-11-97	**Boring ID** **SK-SB-171**

Drilling Contractor: LEA
Drilling Method: GeoProbe
Sampling Method: MC
Groundwater Observations:
Depth: NM **At:** **Hours** ▽
Depth: **At:** **Hours** ▼

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: GeoProbe
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1631525	85		Top 5": Black, bituminous asphalt; Bottom 16": Light brown, fine SAND, dry 0-10", moist 10-16", loose, bituminous scattered through sample	1.9
	1631526	85		Yellowish-brown, fine SAND, trace(-) medium Sand, moist, loose; Greyish-orange modeling at 10-20", trace organic matter, wet at 10"	2.7
4	1631527	100		Top 16": Yellowish-brown, fine SAND, trace organic matter, wet, loose; ;Middle 3": Reddish-brown, fine to very fine SAND; Bottom 5": Grey, SILT, wet, loose	0.4
	1631529 1631528	100		Top 9": Same as middle 3": Middle 10": Greyish-brown, fine SAND, wet, loose; Bottom 5": Yellowish-brown, fine SAND, fine to coarse Sand, varved, wet, loose	1.3
8	1631530	75		Yellowish-brown, fine SAND, trace medium Sand, wet, loose	2.9
	1631531	75		As Above	1.5
12	1631532	88		Top 6": Yellowish-brown, fine to medium SAND, wet, loose; Bottom 15": very fine to fine SAND (yellowish-brown), wet, loose	22.5
	1631533	88		Top 8": Yellowish-brown, fine to medium SAND, wet, loose; Bottom 13": Grey, varved CLAY, wet, loose	7.5
16				Bottom of Boring 16'	
20					
24					

Comments: Boring backfilled with bentonite chips

Printed On: 2/9/1998

Boring N SK-SB-171

LEA
LOUREIRO ENGINEERING ASSOCIATES, PC
100 Northwest Drive, Plainville, Connecticut, 06062, Phone(203)747-6181 FAX (203)747-8822

GEOLOGIC BORING LOG

Project: VPSA Storage Area Add. Inv. **LEA Comm No:** 68V7056 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04/15/97 **End Date** 04/15/97	**Boring ID** **SK-SB-172**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1632069	83		Top 3": Black bituminous; Bottom 17": Dark brown, fine SAND, trace silt, trace organic matter, dry, loose, black-staining from 3-10", process stone, fine Gravel at top	2.4
	1632068	83		Yellowish brown, fine SAND, trace medium Sand, trace organic matter, moist, loose, trace Silt in top 10"	0.4
4	1632067	92		Top 17": Yellowish brown, fine to medium SAND, wet, loose; Bottom 5": Grey, fine SAND, little Silt, wet, loose, wet at top	0.2
	1632070 1632071	92		Top 10": Greyish brown, fine SAND, wet, loose; Bottom 12": Greyish brown, fine to medium SAND, wet, loose	0.4
8	1632072	58		Top 3": As Above last 12"; Bottom 11": Greyish brown, fine to very fine SAND, wet, loose	0.7
	1632073	58		Greyish brown to yellowish brown, fine to medium SAND, wet, loose	0.3
12	1632074	67		Yellowish brown, fine to medium SAND, wet, loose	0.7
	1632075	67		Grey, varved CLAY, wet, loose	0.2
16				Bottom of Boring at 16'	
20					
24					

Comments: Boring backfilled with bentonite chips

Printed On: 2/9/1998

Boring No: SK-SB-172

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GEOLOGIC BORING LOG

Project: VPSA Storage Area Add. Inv. **LEA Comm No:** 68V7056 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04/15/97 **End Date** 04/15/97	**Boring ID** **SK-SB-173**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1632076	83		Top 10": Black bituminous asphalt, some greyish brown, fine SAND, little process stone, fine Gravel, dry, loose; Bottom 10": Dark brown, fine SAND, trace coarse Silt, little organic matter, black sapric organic matter at 16-20"	0.5
	1632077	83		Yellowish brown, fine SAND, trace Silt, moist, loose, wet at bottom	0.6
4	1632078	83		Top 14": Yellowish brown, fine to medium SAND, wet, loose; Bottom 6": Yellowish brown, fine to very fine SAND, wet, loose	0.4
	1632079	83		Top 5": Grey, very fine SAND, little Silt, wet, loose; Bottom 15": Greyish brown, fine SAND (10") grading to fine to medium Sand (5") wet, loose	1.1
8	1632080	75		Brown, fine SAND grading to yellowish fine to medium SAND, wet, loose	0.8
	1632081	75		Top 8": Yellowish brown, fine to medium SAND, wet, loose; Bottom 8": Light olive brown, fine to very fine SAND, wet, loose	0.2
12	1632082	71		Yellowish brown, medium SAND, wet, loose	0.9
	1632083	71		Top 3": As Above, trace coarse Sand; Bottom 14": Grey, varved CLAY, wet, loose	0.5
16				Bottom of Boring at 16'	
20					
24					

Comments: Boring backfilled with bentonite chips

LEA
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GEOLOGIC BORING LOG

Project: VPSA Storage Area Add. Inv. **LEA Comm No:** 68V7056 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04/15/97 **End Date** 04/15/97	**Boring ID** **SK-SB-174**
Drilling Contractor: LEA **Drilling Method:** Geoprobe **Sampling Method:** Macro Core **Groundwater Observations:** **Depth:** At: Hours ▽ **Depth:** At: Hours ▼	**Logged By:** J. Trzaski **Drilling Foreman:** D. Brisson **Drill Rig:** Geoprobe 5400 **Surface Elevation:** **Northing:** **Easting:**	

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1632084	83		Top 6": Black bituminous asphalt and greyish brown, fine SAND and some process stone, fine Gravel, dry, loose; Middle 8": Dark brown, fine SAND, trace Silt; Bottom 6": Strong brown, fine to very fine SAND, trace Silt, dry, loose	0
	1632085	83		Yellowish brown, fine to medium SAND, moist, loose	0.1
4	1632086	100		Yellowish brown, fine SAND, trace medium Sand, wet, loose, wet at top	0.5
	1632087	100		Top 5": Grey, SILT with fine Sand, wet, moderately dense; Bottom 19": Greyish brown, fine SAND, wet, moderately dense,	0.1
8	1632088	75		Greyish brown, fine to very fine SAND grading to fine SAND, wet, loose	0
	1632089	75		Top 6": Greyish brown, fine SAND, wet, loose; Bottom 12": Light olive brown, fine to very fine SAND, wet, loose	0
12	1632090	75		Top 16": Yellowish brown, medium SAND, trace coarse Sand, wet, loose; Bottom 2": Grey, varved CLAY, wet, loose.	0
	1632091	75		Same as above last 2"	0
16				Bottom of Boring at 16'	
20					
24					

Comments: Boring backfilled with bentonite chips

Printed On: 2/9/1998

Boring No: SK-SB-174

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GEOLOGIC BORING LOG

Project: VPSA Storage Area Add. Inv. **LEA Comm No:** 68V7056 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04/15/97 **End Date** 04/15/97	**Boring ID** **SK-SB-175**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1632092	83		4": Concrete cored with Geoprobe; Top 8": Dark brown, fine SAND, little process stone, coarse Gravel, dry, loose; Bottom 12": Strong brown, fine SAND, some Silt, dry, moderately dense	0.2
	1632093	83		Strong brown, fine SAND grading to yellowish brown, fine to medium SAND, moist, loose, wet at bottom	0.4
4	1632094	100		Top 19": Yellowish brown, fine to medium SAND (10") grading to fine SAND (9") wet, loose; Bottom 5": Grey, SILT, little fine SAND, wet, moderately dense	0.5
	1632095	100		Greyish brown, fine SAND, trace medium Sand in bottom 6", wet, moderately dense	1.2
8	1632096	75		Greyish brown, fine to very fine SAND, wet, loose	0.4
	1632097	75		Top 6": Greyish brown, fine SAND, wet, loose; Bottom 12": Light olive brown, fine to very fine SAND, wet, loose	1.4
12	1632098	67		Yellowish brown, medium SAND, wet, loose	0
	1632099	67		Grey, varved CLAY, wet, loose	0
16				Bottom of Boring at 16'	
20					
24					

Comments: Boring backfilled with bentonite chips

Printed On: 2/9/1998

Boring No: SK-SB-175

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GEOLOGIC BORING LOG

Project: VPSA Storage Area Add. Inv. **LEA Comm No:** 68V7056 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04/16/97 **End Date** 04/16/97	**Boring ID** **SK-SB-176**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1632102	100		Top 2": Organic debris; Bottom 22": Brown, fine SAND and SILT, trace organic matter, dry, moderately dense	0
	1632103	100		Top 4": Same as above last 22"; Middle 14": Strong brown, fine SAND and SILT, trace organic matter, moist, loose; Bottom 6": Yellowish brown, fine SAND, moist, loose	0
4	1632104	92		Top 8": Brown, fine to very fine SAND, wet, loose; Middle 6" : Grey, SILT and fine SAND, wet, moderately dense; Bottom 8" : Same as top 8", wet at top	0.6
	1632105 1632106	92		Yellowish brown, fine to medium SAND, wet, loose	1.0
8	1632107	62		As Above	0.7
	1632109	62		Greyish brown, medium to fine SAND, trace coarse Sand, wet, loose	1.4
12	1632100	100		Top 10": Greyish brown, medium SAND, trace coarse Sand grading to greyish brown, fine Sand, wet, loose	16.0
	1632111	100		Top 12": Greyish brown, fine SAND, wet, loose; Bottom 12": Grey, varved CLAY, wet, loose	0.2
16				Bottom of Boring 16'	
20					
24					

Comments: Boring backfilled with bentonite chips

Printed On: 2/9/1998

Boring No: SK-SB-176

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GEOLOGIC BORING LOG

Project: VPSA Storage Area Add. Inv. **LEA Comm No:** 68V7056 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04/16/97 **End Date** 04/16/97	**Boring ID** SK-SB-177

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1632112	100		Top 2": Organic matter; Bottom 22": Dark yellowish brown, SILT and fine SAND, dry, loose, trace organic matter	0
	1632113	100		Top 4": As Above last 22"; Bottom 20": Strong brown, fine SAND and SILT grading to fine SAND, moist, loose	0
4	1632114	79		Top 6": Greyish brown, fine SAND grading to very fine SAND, wet, loose; Middle 6": Grey, SILT, some fine Sand, wet, loose; Bottom 7": Greyish brown, fine to very fine SAND, wet, loose	1.2
	1632115	79		Greyish brown, fine SAND (11") grading to fine to medium SAND, wet, loose (8")	0.8
8	1632116	75		Greyish brown, fine to medium SAND, wet, loose	1.0
	1632117	75		Top 6": As Above; Bottom 12": Greyish brown, medium SAND, trace coarse Sand, wet, loose	1.0
12	1632118	83		Top 15": Light olive grey, fine SAND, some very fine Sand, wet, loose; Bottom 5": Yellowish brown, medium SAND, trace coarse Sand, wet, loose	50.0
	1632119	83		Top 8": Yellowish brown, medium to fine SAND, trace coarse Sand, wet, loose; Bottom 12": Grey, varved CLAY, wet, loose	1.0
16				Bottom of Boring at 16'	
20					
24					

Comments: Boring backfilled with bentonite chips

Printed On: 2/9/1998

Boring No. SK-SB-177

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GEOLOGIC BORING LOG

Project: VPSA Storage Area Add. Inv.
LEA Comm No: 68V7056
Client: Pratt & Whitney
Location: East Hartford, CT

Start Date 04/16/97
End Date 04/16/97

Boring ID SK-SB-178

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1632120	100		Top 3": Organic debris; Bottom 21": Brown, SILT, some fine Sand, dry, loose, black-stained last (with organic matter) 4", trace organic matter	0.6
	1632121	100		Light yellowish brown, SILT and fine SAND, shading to very fine to fine Sand (15"), moist, loose	0.4
4	1632122	75		Top 6": Light olive brown, very fine to fine SAND, wet, loose; Next 3": Grey, SILT, some fine Sand, wet, loose; Bottom 9": Greyish brown, very fine to fine SAND, Gravel, very fine to fine Sand, wet, loose	1.7
	1632123	75		Greyish brown, fine to medium SAND, wet, loose	0.4
8	1632124	58		As Above	2.7
	1632125	58		As Above	46.0
12	1632126	83		Yellowish brown, medium to fine SAND, trace coarse Sand, wet, loose	8.2
	1632127	83		Top 8": Greyish brown, fine SAND, trace(-) medium Sand, wet, loose; Bottom 12": Grey, varved CLAY, wet, loose	0.2
16				Bottom of Boring at 16'	
20					
24					

Comments: Boring backfilled with bentonite chips

Printed On: 2/9/1998

Boring No: SK-SB-178

LEA
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GEOLOGIC BORING LOG

Project: VPSA Storage Area Add. Inv. **LEA Comm No:** 68V7056 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04/16/97 **End Date** 04/16/97	**Boring ID** **SK-SB-179**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1632128	100		Top 3": Organic matter; Bottom 21": Brown, fine SAND, some Silt, trace organic matter, dry, moderately dense	0
	1632129	100		Top 5": Dark brown, SILT and sapric organic matter, moist, loose; Bottom 19": Yellowish brown, fine SAND, moist, loose	4.4
4	1632130	88		Top 4": Yellowish brown, very fine to fine SAND, wet, loose; Next 6": Grey, SILT, some fine Sand, wet, loose; Next 2": Same as above top 4"; Bottom 9": Yellowish brown, fine SAND, wet, loose	1.2
	1632131	88		Greyish brown, fine to medium SAND, wet, loose	0
8	1632132	67		As Above	4.0
	1632133	67		Brownish grey, medium to fine SAND, trace coarse Sand, wet, loose	160
12	1632134	96		Top 8": As Above; Next 2": Yellowish brown, medium to coarse SAND; Next 6": Yellowish brown, fine to medium SAND; Bottom 7": Grey, varved CLAY, wet, loose	1.0
	1632135	96		Same as above last 7"	0
16				Bottom of Boring at 16'	
20					
24					

Comments: Boring backfilled with bentonite chips

Printed On: 2/9/1998

Boring No: SK-SB-179

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GEOLOGIC BORING LOG

Project: VPSA Storage Area Add. Inv. **LEA Comm No:** 68V7056 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04/16/97 **End Date** 04/16/97	**Boring ID** SK-SB-180

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours ▽
Depth: At: Hours ▼

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1632136	100		Top 2": Organic debris; Bottom 22": Dark yellowish brown, SILT, some fine Sand, little organic matter, dry, loose	500
	1632137	100		Top 6": Same as above last 22"; Middle 6": Black, sapric organic matter with dark brown, SILT; Bottom 12": Light yellowish brown, fine SAND, moist, loose	500
4	1632138	83		Top 6": Greyish brown, fine to very fine SAND, wet, loose; Next 7": Grey, SILT, trace fine Sand, wet, moderately dense; Bottom 7": Greyish brown, fine to very fine SAND, wet, loose	200
	1632139	83		Greyish brown, fine SAND, grading to (12") fine to medium SAND, wet, loose	2.0
8	1632140	58		Greyish brown, fine to medium SAND, trace coarse Sand, wet, loose, 1" amber colored lense at 2"	110
	1632141	58		As Above	280
12	1632142	100		Yellowish brown, medium to fine SAND, trace coarse Sand, wet, loose	20.0
	1632143	100		Top 12": As Above; Bottom 12": Grey, varved CLAY, wet, loose	1.6
16				Bottom of boring at 16'	
20					
24					

Comments: Boring backfilled with bentonite chips

Printed On: 2/9/1998

Boring No: SK-SB-180

LEA
LOUREIRO ENGINEERING ASSOCIATES, PC
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GEOLOGIC BORING LOG

Project: VPSA Storage Area Add. Inv. **LEA Comm No:** 68V7056 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04/17/97 **End Date** 04/17/97	**Boring ID** **SK-SB-181**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: B. Tomicic
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1632147	100		Top 4": Concrete; Dark brown, fine SAND, some(-) Silt, moderately dense, slightly moist, poorly sorted, assorted Cobbles	4.6
	1632148	100		Top 3": As Above; Bottom 21": Brown, fine SAND, some(+) coarse Sand, moist, loose, poorly sorted	4.5
4	1632149	75		Top 4": As Above; 2": Grey, fine SAND, trace(+) Silt, dense; Bottom 12": Brown, coarse SAND, trace(-) fine Sand, moist, poorly sorted	4.4
	1632150	75		As Above, mottled, wet	5.7
8	1632151	62		Greyish brown, coarse SAND, trace(+) fine Sand, wet, loose, poorly sorted	4.4
	1632152 1632153	62		As Above	4.6 4.4
12	1632154	100		As Above	3.2
	1632155	100		Top 10": As Above, mottled; Bottom 18": Olive grey, varved CLAY, dense	2.3
16				Bottom of Boring at 16'	
20					
24					

Comments: Boring backfilled with bentonite chips upon completion

Printed On: 2/12/1998

Boring No. K-SB-181

LEA
LOUREIRO ENGINEERING ASSOCIATES, PC
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GEOLOGIC BORING LOG

Project: VPSA Storage Area Add. Inv. **LEA Comm No:** 68V7056 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04/17/97 **End Date** 04/17/97	**Boring ID** **SK-SB-182**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: B. Tomicic
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1632156	79		Top 29": Bituminous concrete; Bottom 1': Brown, fine SAND and(-) coarse Sand, moderately dense, poorly sorted, Cobbles (rip rap)	2.2
	1632157	79		Brown, fine SAND, some(+) coarse Sand, slightly moist, moderately dense, poorly sorted	2.8
4	1632158	88		Top 1': As Above; 6": Grey, fine SAND, some(-) Silt, moderately dense; Bottom 6": Brown, fine SAND, some(+) coarse Sand, moist	5.1
	1632159	88		As Above; 1": Mottled layer at 7', wet	4.6
8	1632160	75		As Above	4.4
	1632161	75		As Above, mottled	13.2
12	1632162	100		Brown, fine SAND and coarse SAND, wet, loose	2.5
	1632163	100		Top 6": Brown, coarse SAND, some(-) fine Sand, wet, loose; Bottom 1.5': Olive grey, varved CLAY, dense	3.3
16				Bottom of Boring at 16'	
20					
24					

Comments: Boring backfilled with bentonite chips upon completion

Printed On: 2/9/1998

Boring No: SK-SB-182

LOUREIRO ENGINEERING ASSOCIATES, PC
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GEOLOGIC BORING LOG

Project: VPSA Storage Area Add. Inv. **LEA Comm No:** 68V7056 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04/17/97 **End Date** 04/17/97	**Boring ID** SK-SB-183

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: B. Tomicic
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1632164	83		Top 4": Concrete; Dark brown, fine SAND, trace(-) Silt, slightly moist, moderately dense	3.4
	1632165	83		Brown, fine SAND, trace(+) coarse Sand, slightly moist, moderately dense, poorly sorted, slightly rank odor	4.5
4	1632166	88		Top 12": Grey brown, fine SAND, some(+) coarse Sand, wet, loose, rank odor, Cobbles & Pebbles; Bottom 6": Brown, fine SAND, some(+) coarse Sand, wet, moderately dense, poorly sorted, 2" CLAY lense at 5'	2.3
	1632167	83		As Above, 2" mottled layer at 7'	4.5
8	1632168	88		As Above; loose	9.1
	1632169	88		As Above	8.5
12	1632170	75		As Above	3.1
	1632171	75		Olive grey, varved CLAY, dense	5.9
16				Bottom of Boring at 16'	
20					
24					

Comments: Boring backfilled with bentonite chips upon completion

Printed On: 2/9/1998

Boring N

SK-SB-183

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100 Northwest Drive, Plainville, Connecticut, 06062, Phone(203)747-6181 FAX (203)747-8822

GEOLOGIC BORING LOG

Project: VPSA Storage Area Add. Inv. **LEA Comm No:** 68V7056 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04/17/97 **End Date** 04/17/97	**Boring ID** SK-SB-184

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: NM **At:** **Hours**
Depth: **At:** **Hours**

Logged By: B. Tomicic
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1632172	83		Top 3": Bituminous concrete; 6": Red, coarse SAND, some(-) fine Sand, dry, loose, Cobbles; Bottom 7": Blackish brown, coarse SAND, trace(+) fine Sand, slightly moist, moderately dense, Cobbles, fibric organic matter	2.4
	1632173	83		Top 6": As Above; Bottom 18": Brown, fine SAND, trace(-) coarse Sand, slightly moist, moderately dense	4.2
4	1632174	100		Top 1': As Above; 4": Olive grey, SILTY CLAY, dense; 8": Brown, medium SAND, trace(-) coarse Sand, slightly moist, loose	2.8
	1632175	100		As Above, moist	4.2
8	1632176	62		As Above, wet	5.3
	1632177	62		As Above	39.2
12	1632178	100		Top 1': Grey, coarse SAND, some(+) medium Sand, wet, loose; Bottom 1': Reddish brown, medium SAND, some(-) coarse Sand, wet, loose	4.3
	1632179	100		Top 1': As Above; Bottom 1': Olive grey, varved CLAY, dense	3.9
16				Bottom of Boring at 16'	
20					
24					

Comments: Boring backfilled with bentonite chips upon completion

Printed On: 2/9/1998

Boring No: SK-SB-184

LEA
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GEOLOGIC BORING LOG

Project: VPSA Storage Area Add. Inv. **LEA Comm No:** 68V7056 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04/18/97 **End Date** 04/18/97	**Boring ID** **SK-SB-185**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: NR **At:** **Hours**
Depth: **At:** **Hours**

Logged By: J. Sweeton
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1632181	95		0-2": Bituminous Pavement; 2-4": Process stone; 4-21": Dark brown, fine SAND, some Silt, little medium Sand, moist, loose	1.6
	1632182	95		0-4": As Above; 4-8": Dark grey, SILT, some fine Sand, organic matter, moist, dense; 8-22": Brown, fine SAND and medium SAND, moist, loose	60
4	1632185	91		0-2": Grey brown, fine SAND, trace Silt, moist, loose; 2-20" : Brown, fine SAND, trace medium Sand, moist, loose; 20-22: Brown, medium SAND, trace Silt, trace coarse Sand, moist, loose	150
	1632184	91		0-20": As Above	100
8	1632185	82		0-18": Brown, medium SAND, trace Silt, trace fine Sand, wet, loose	20
	1632186	82		0-18": Brown, medium SAND, some coarse Sand, trace fine Sand, wet, loose	10
12	1632187	100		0-22": Brown, medium SAND, trace fine Sand, wet, loose	4
	1632188	100		0-8": Red brown, coarse SAND, some medium Sand, wet, loose; 8-22": Grey, CLAY, trace fine to very fine Sand, trace Silt, varve, moist, dense	2
16				Bottom of Boring at 16'	
20					
24					

Comments:

LEA
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GEOLOGIC BORING LOG

Project: VPSA Storage Area Add. Inv. **LEA Comm No:** 68V7056 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04/18/97 **End Date** 04/18/97	**Boring ID** **SK-SB-186**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: NR **At:** **Hours**
Depth: **At:** **Hours**

Logged By: J. Sweeton
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1632189	86		0-2": Bit pave; 2-4": Process stone; 4-19": Dark brown, medium SAND, some fine Sand, trace organics, moist, loose	71000
	1632190	86		0-8": As Above; 8-11": Grey brown, fine SAND, some Silt, some organics, moist, dense; 11-19": Grey, medium SAND, trace fine Sand, moist, loose	71000
4	1632191	91		0-6": Grey, fine SAND, some medium Sand, moist, dense; 6-22" : Brown, medium SAND, trace fine Sand, wet, loose	100
	1632192	91		0-16": As Above; 16-20": Red brown, medium SAND, trace fine Sand, trace coarse Sand, wet, loose	70
8	1632193	91		0-20": Brown, medium SAND, some coarse Sand, trace fine Sand, wet, loose	80
	1632194	91		0-20": As Above	10
12	1632195	95		0-21": Red brown, medium SAND, some coarse Sand, trace fine Sand, wet, loose	2
	1632196	95		0-11": As Above; 11-21: Grey, CLAY, trace fine to very fine Sand, trace Silt, varve, moist, dense	2
16				Bottom of boring at 16'	
20					
24					

Comments:

Printed On: 2/9/1998

Boring No: SK-SB-186

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GEOLOGIC BORING LOG

Project: VPSA Storage Area Add. Inv. **LEA Comm No:** 68V7056 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04/18/97 **End Date** 04/18/97	**Boring ID** **SK-SB-187**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: NR **At:** **Hours**
Depth: **At:** **Hours**

Logged By: J. Sweeton
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1632197	82		0-2": Bit pav: 2-6": Process stone; 6-22": Dark brown, fine SAND, some medium Sand, trace coarse Sand, trace organic, trace Silt, moist, loose	0
	1632198	82		0-8": As Above; 8-12": Black brown, fine SAND, some organic, trace Silt, moist, loose; 12-18": Brown, medium SAND, some fine Sand, trace Silt, moist, loose	0
4	1632199	95		0-3": As Above; 3-6": Grey, SILT, some fine Sand, moist, dense; 6-9": Brown, SILT, some fine Sand, moist, dense; 9-21": Brown, fine SAND, some medium Sand, trace Silt, moist, loose	600
	1632200	95		0-21": Brown, medium SAND, trace fine Sand, trace coarse Sand, wet, loose	>1000
8	1632201	82		0-18": Brown, medium SAND, some coarse Sand, trace Silt, wet, loose	60
	1632202	82		0-10": As Above; 10-18": Red brown, medium SAND, some coarse Sand, wet, loose	80
12	1632203	100		0-14": Red brown, medium SAND, trace fine Sand, wet, loose; 14-22": Red brown, medium SAND, some coarse Sand, trace fine Sand, trace Gravel, wet, loose	2
	1632204	100		0-5": As Above; 5-22": Grey, CLAY, trace fine SAND, trace Silt, moist, dense	2
16				Bottom of Boring at 16'	
20					
24					

Comments:

Printed On: 2/12/1998

Boring I: SK-SB-187

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GEOLOGIC BORING LOG

Project: VPSA Storage Area Add. Inv. **LEA Comm No:** 68V7056 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04/21/97 **End Date** 04/21/97	**Boring ID** SK-SB-188

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1632212	88		Top 2": Organic debris; Middle 12": Dark yellowish brown, SILT with fine Sand, dry, loose, little organic matter; Bottom 7": Reddish brown, fine SAND, moist, loose, trace organic matter	3.5
	1632213	88		Top 5": Same as above last 7", wet, loose, wet at top; Middle 8": Grey, SILT, moist, moderately dense, some organic matter; Bottom 8": Olive grey, fine to very fine SAND, moist, loose	450
4	1632214	75		Greyish brown, very fine to fine SAND (8") grading to fine SAND (10"), wet, loose, wet at top	3.0
	1632215	75		Greyish brown to yellowish brown, fine to medium SAND, wet, loose	7.4
8	1632216	58		As Above	15.0
	1632217 1632218	58		Top 7": Greyish brown, fine to very fine SANd, wet, loose; Bottom 7": Greyish brown, fine to medium SAND, wet, loose	18.0
12	1632219	100		Yellowish brown, fine to medium SAND, trace coarse Sand, wet, loose	75.0
	1632220	100		Top 6": Yellowish brown, medium SAND, wet, loose; Bottom 18" : Grey, varved CLAY, wet, loose	3.0
16				Bottom of boring at 16'	
20					
24					

Comments:

Printed On: 2/9/1998

Boring No: SK-SB-188

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GEOLOGIC BORING LOG

Project: VPSA Storage Area Add. Inv. **LEA Comm No:** 68V7056 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04/21/97 **End Date** 04/21/97	**Boring ID** **SK-SB-189**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1632221	71		Dark yellowish brown to yellowish brown, fine SAND, little Silt, moist, loose, little organic matter, concrete pieces at 7" and 10-13"	3.2
	1632222	71		Top 5": Yellowish brown, fine SAND, wet, loose (wet at top); Bottom 11": Grey, SILT, moist, dense, black-staining top 4", Cobble at top	60.0
4	1632223	75		Top 8": Grey, SILT, some fine Sand, moist, moderately dense; Bottom 8": Grey, very fine to fine SAND, wet, loose	4.0
	1632224	75		Top 4": As Above last 8"; Bottom 14": Greyish brown, fine SAND, wet, loose	6.0
8	1632225	50		Top 10": Yellowish brown, fine SAND, little medium Sand, wet, loose; Bottom 2": Greyish brown, medium fine to very fine SAND	7.4
	1632226	50		Top 6": As Above last 2"; Bottom 6": Greyish brown, medium to fine SAND, wet, loose	11.0
12	1632227	100		Yellowish brown, medium to fine SAND, trace coarse Sand, wet, loose	3.2
	1632228	100		Top 4": As Above; Bottom 20": Grey, varved CLAY, wet, loose	4.4
16				Bottom of Boring at 16'	
20					
24					

Comments:

Printed On: 2/9/1998

Boring I SK-SB-189

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GEOLOGIC BORING LOG

Project: VPSA Storage Area Add. Inv. **LEA Comm No:** 68V7056 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04/21/97 **End Date** 04/21/97	**Boring ID** **SK-SB-190**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1632229	92		Dark yellowish brown, SILT with fine SAND, little organic matter, dry, loose	20.0
	1632230	92		Dark brown, SILT with fine SAND, some organic matter, moist, loose, wet at bottom	>1000
4	1632231	92		Top 4": As Above, wet, loose; Middle 10": Grey, SILT, some fine Sand, wet, moderately dense; Bottom 8": Greyish brown, fine to very fine SAND	300
	1632232	92		Greyish brown, fine SAND, wet, loose	6.0
8	1632233	71		Top 4": Yellowish brown, fine to medium SAND, wet, loose; Bottom 13": Greyish brown, fine SAND, wet, loose	45.0
	1632234	71		Top 6": Greyish brown, fine to medium SAND; Bottom 11": Yellowish brown, medium to fine SAND, wet, loose	4.6
12	1632235	100		Greyish to yellowish brown, fine SAND, wet, loose	0
	1632236	100		Top 6": Greyish brown, fine to medium SAND, wet, loose; Bottom 18": Grey, varved CLAY, wet, loose	1.6
16				Bottom of Boring at 16'	
20					
24					

Comments:

Printed On: 2/9/1998

Boring No: SK-SB-190

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GEOLOGIC BORING LOG

Project: VPSA Storage Area Add. Inv. **LEA Comm No:** 68V7056 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04/21/97 **End Date** 04/21/97	**Boring ID** **SK-SB-191**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1632237	71		Top 2": Bituminous asphalt; Next 3": Red, medium to fine SAND, trace(-) fine and coarse Gravel, dry, loose; Next 7": Yellowish brown, fine SAND, dry, loose; Bottom 5": dark brown, SILT, little fine Sand, little organic matter	180
	1632238	71		Top 11": Same as above last 5", moist, loose, wet at 11"; Bottom 6": Grey, SILT, moist, moderately dense	>1000
4	1632239	92		Top 8": Same as above last 6"; Bottom 14": Greyish brown, very fine to fine SAND, wet, loose	>1000
	1632240	92		Greyish brown, fine SAND (12") grading to (10") fine to medium SAND, wet, loose	100
8	1632241	75		Greyish to yellowish brown, fine SAND, wet, loose	23.0
	1632242	75		Greyish brown, fine to medium SAND, wet, loose	35.0
12	1632243	83		Yellowish brown, medium to fine SAND, wet, loose	1.6
	1632244	83		Top 15": Yellowish brown, fine to medium SAND, wet, loose; Bottom 5": Grey, varved CLAY, wet, loose	1.6
16				Bottom of Boring at 16'	
20					
24					

Comments:

Printed On: 2/12/1998

Boring I SK-SB-191

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GEOLOGIC BORING LOG

Project: VPSA Storage Area Add. Inv.
LEA Comm No: 68V7056
Client: Pratt & Whitney
Location: East Hartford, CT

Start Date 04/22/97
End Date 04/22/97

Boring ID SK-SB-192

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1632256	67		Top 5": Dark brown, SILT, little fine Sand, little organic matter, moist, loose; Bottom 11": Yellowish brown, fine SAND, moist, loose	4.5
	1632257			Top 6": Same as above last 11", moist, loose; Middle 2": Black, sapric organic matter with dark brown SILT, moist, loose; Bottom 8": Grey, SILT, trace fine Sand, moist, moderately dense	62
4	1632258	75		Top 5": Same as above last 8", wet at top; Bottom 13": Greyish brown, fine SAND, wet, loose	9.5
	1632259			Same as above last 13"	9.3
8	1632260	71		Yellowish brown, fine to medium SAND, wet, loose	8.0
	1632261 1632262			As Above, trace coarse SAND	5.8
12	1632263	100		Yellowish brown, medium to fine SAND, trace coarse Sand, wet, loose	4.2
	1632264			Top 5": As Above; Bottom 19": Grey, varved CLAY, wet, loose	2.2
16				Bottom of Boring at 16'	
20					
24					

Comments:

Printed On: 2/9/1998

Boring No: SK-SB-192

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GEOLOGIC BORING LOG

Project: VPSA Storage Area Add. Inv. **LEA Comm No:** 68V7056 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04/22/97 **End Date** 04/22/97	**Boring ID** **SK-SB-193**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: NR **At:** **Hours**
Depth: **At:** **Hours**

Logged By: D. Brisson
Drilling Foreman: J. Trzaski
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1632265	83		Top 4": Topsoil; Bottom 16": Brown, fine to very fine SAND and SILT, trace organic matter, wet, moderately dense	0
	1632266			Top 8": As Above with trace Gravel; Middle 8": Dark brown to black, very fine SAND and SILT, trace fine Sand, organic matter, moist, dense; Bottom 4": Light brown, fine SAND, wet, loose	50
4	1632267	83		Top 10": Grey, very fine SAND and SILT, trace fine Sand, moist, dense; Bottom 10": Dark grey, medium fine SANd, wet, loose	18
	1632268			Top 20": As Above; Bottom 10"	5
8	1632269	75		Top 5": As Above; Bottom 13": Grey, fine to very fine SAND, wet, loose	2
	1632270			18": Grey orange brown, medium to fine SANd, trace(-) coarse Sand, wet, loose	2
12	1632271	75		Top 8": As Above; Middle 4": Grey, medium to fine SAND, little coarse Sand, wet, loose; Bottom 4": Orange brown, coarse to fine SAND, wet, loose, iron staining	1.5
	1632272			18": Grey, CLAY, trace fine Sand, wet, dense, varved	0.5
16				Bottom of Boring at 16'	
20					
24					

Comments:

Printed On: 2/9/1998

Boring # SK-SB-193

LEA
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GEOLOGIC BORING LOG

Project: VPSA Storage Area Add. Inv. **LEA Comm No:** 68V7056 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04/22/97 **End Date** 04/22/97	**Boring ID** SK-SB-194

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1632273	83		Top 4": Black bituminous asphalt; Middle 3": Red, medium SANd, little fine and coarse Gravel, trace fine Sand, dry, loose, Fill; Bottom 13": Dark brown, SILT and fine SAND, some organic matter, moist, loose	>1000
	1632274			Top 11": Same as above last 13": Middle 3": Black, sapric organic matter; Bottom 6": Grey, SILT, some fine Sand, moist, moderately dense	>1000
4	1632275	54		Top 10": Same as above last 6", wet at top; Bottom 3": Greyish brown, fine to very fine SANd, wet, loose	900
	1632276			Greyish brown, fine SAND, wet, loose	400
8	1632277	71		Orangish brown, fine to medium SAND, wet, loose	3.2
	1632278			Greyish brown, fine SANd (6") grading light olive brown fine to medium SAND (11"), wet, loose	3.4
12	1632279	100		Top 8": Yellowish brown, medium SAND, trce coarse Sand, wet, loose; Bottom 16": Yellowish brown, medium to fine SANd, wet, loose	0.7
	1632280			Top 8": Same as above last 16": Bottom 16": Grey, varved CLAY, wet, loose	2.2
16				Bottom of Boring at 16'	
20					
24					

Comments:

Printed On: 2/9/1998

Boring No: SK-SB-194

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GEOLOGIC BORING LOG

Project: VPSA Storage Area Add. Inv. **LEA Comm No:** 68V7056 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04/23/97 **End Date** 04/23/97	**Boring ID** **SK-SB-195**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1632284	88		Top 3": Organic debris with Dark brown, very fine to fine SAND, Cobble at 4": Bottom 18": Dark yellowish brown, fine to very fine SAND, little organic matter, trace Silt, moist, loose	1.6
	1632285			Top 13": Pale brown, SILT, little organic matter, moist, loose; Bottom 8": Yellowish brown, fine SANd, wet, loose	0.8
4	1632286 1632287	83		Top 8": Grey, SILT with fine Sand, wet, moderately dense, loose; Middle 8": Greyish brown, fine to very fine SAND, wet, loose; Bottom 4": Greyish brown, fine SANd, wet, loose	2.8
	1632288			Same as above last 4"	2.3
8	1632289	58		Yellowish brown, fine SAND, trace medium Sand, wet, loose	2.6
	1632290			Yellowish brown, fine to medium SAND, wet, loose	4.8
12	1632291	96		Top 12": As Above; Bottom 13": Yellowish brown, fine SAND, little very fine Sand, wet, loose	3.5
	1632292			Top 18": Yellowish brown, fine SAND, trace medium Sand, wet, loose; Bottom 5": Grey, varved CLAY, wet, loose	3.6
16				Bottom of Boring 16'	
20					
24					

Comments:

LEA
LOUREIRO ENGINEERING ASSOCIATES, PC
100 Northwest Drive, Plainville, Connecticut, 06062, Phone(203)747-6181 FAX (203)747-8822

GEOLOGIC BORING LOG

Project: VPSA Storage Area Add. Inv. **LEA Comm No:** 68V7056 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04/23/97 **End Date** 04/23/97	**Boring ID** **SK-SB-196**
Drilling Contractor: LEA **Drilling Method:** Geoprobe **Sampling Method:** Macro Core **Groundwater Observations:** **Depth:** At: Hours ▽ **Depth:** At: Hours ▼	**Logged By:** J. Trzaski **Drilling Foreman:** D. Brisson **Drill Rig:** Geoprobe 5400 **Surface Elevation:** **Northing:** **Easting:**	

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1632293	83		Top 12": Red, medium to fine SAND, little fine to coarse Gravel, trace coarse Sand, dry, loose, Fill; Middle 2": Black, sapric organic matter; Bottom 6": Brownish yellow, SILT, little organic matter, moist, loose	3.5
	1632294			Top 14": Same as above last 6", grading to; Bottom 6": Yellowish brown, fine SANd, wet, loose	4.0
4	1632295	79		Top 12": Same as above last 6"; Bottom 7": Greyish brown, fine to very fine SAND, wet, loose	6.0
	1632296			Top 5": Grey, SILT, some fine Sand, wet, moderately dense; Bottom 14": Yellowish brown to greyish brown fine SAND, trace medium Sand, wet, loose	4.0
8	1632297	71		Greyish brown, fine SAND, trace medium Sanbd, trace very fine Sand, wet, loose	0
	1632298			Top 6": As Above; Bottom 11": Orangish brown, fine to medium SANd, wet, loose	0
12	1632299	75		Top 6": As Above; Bottom 12": Greyish brown, fine to very fine SAND, wet, loose	0
	1632300			Top 3": Same as last 12"; Middle 5": Yellowish brown, medium to fine SAND; Bottom 10": Grey, varved CLAY, wet, loose	0
16				Bottom of Boring at 16'	
20					
24					

Comments:

Printed On: 2/9/1998

Boring No: SK-SB-196

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GEOLOGIC BORING LOG

Project: VPSA Storage Area Add. Inv. **LEA Comm No:** 68V7056 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04/23/97 **End Date** 04/23/97	**Boring ID** SK-SB-197

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hour
Depth: At: Hours

Logged By: D. Brisson
Drilling Foreman: J. Trzaski
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1632301	83		Top 4": Red brown, coarse to fine SAND and ___, moist, loose; Middle 3": Dark brown to black, trace fine SAND and SILT, trace organics, wet, dense; Bottom 13": Brown, fine to very fine SAND, trace(-) Silt, trace organics, wet, dense	60
	1632302			20": Light brown, fine SAND, trace(-) medium Sand, wet, trace organics, loose	15
4	1632303	50		12": Light brown, fine SAND, trace(-) medium Sand, wet, loose	15
	1632304			12": As Above	5
8	1632305	62		15": Grey, fine to medium SAND, wet, loose	4.2
	1632306			Top 8": Orange brown, fine to medium SAND, wet, loose; Middle 1": Black, fine to coarse SAND, wet, loose; Bottom 6" : Grey, fine SAND, trace(+) medium Sand, wet, loose	3.0
12	1632307	83		Top 10": Orange brown, fine to medium SAND, trace(+) coarse Sand, wet, loose; Bottom 10": Olive grey, fine SANd, wet, loose	3.5
	1632308			Top 6": Grey, orange brown, medium to fine SAND, trace(+) coarse Sand, wet, loose; Bottom 14": Grey, CLAY, trace fine to very fine Sand, varved, wet, dense	2.0
16				Bottom of Boring at 16'	
20					
24					

Comments:

Printed On: 2/9/1998

Boring N K-SB-197

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GEOLOGIC BORING LOG

Project: VPSA Storage Area Add. Inv. **LEA Comm No:** 68V7056 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 04/23/97 **End Date** 04/23/97	**Boring ID** **SK-SB-198**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: **At:** **Hours**
Depth: **At:** **Hours**

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	16324309	100		Top 4": Organic debris; Bottom 20": Dark yellowish brown, SILT and fine to very fine SAND, moist, loose, trace organic matter	9.0
	1632310			Top 14": Brownish yellow, SILT and fine to very fine SANd, wet, loose; Bottom 10": Dark brown, SILT and fine to very fine SAND, wet, loose	40
4	1632311	79		Top 4": Dark brown, SILT and very fine SAND, wet, loose; Middle 8": Grey, SILT, some fine to very fine Sand, wet, moderately dense; Bottom 7": Greyish brown, fine to very fine SAND, wet, loose	50
	1632312			Greyish brown, fine SANd, wet, loose	10
8	1632313	62		Top 6": Greyish brown, fine to coarse SAND, wet, loose; Bottom 9": Orangish brown, fine to medium SAND, wet, loose	3.8
	1632314			Top 4": Same as above last 9"; Middle 6": Greyish brown, fine SAND, wet, loose; Bottom 5": Yellowish brown, fine to medium SAND, trace coarse Sand, wet, loose	3.2
12				Bottom of Boring at 12' No Recovery Macro tube down hole	
16					
20					
24					

Comments:

Printed On: 2/9/1998

Boring No: SK-SB-198

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GEOLOGIC BORING LOG

Project: X-307 Add. Inv. Rubble Piles **LEA Comm No:** 68V7069 **Client:** Pratt & Whitney **Location:** East Hartford	**Start Date** 07/25/97 **End Date** 07/25/97	**Boring ID** **SK-SB-199**

Drilling Contractor: LEA95
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: NR **At:** **Hours**
Depth: **At:** **Hours**

Logged By: B. Tomicic
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 4500
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Prim. Grain Size, Sec. Grain Sizes, Moist, Sort, Spher, Angul, Sed Struct, Density, Cohesive	PID/FID (ppm)
0	1639065	62		Top 2": COBBLES, brown, fine SAND, some(-) medium Sand, loose	0.0
	1639066 1639067			Top 3": Black, fine SAND, trace(+) medium Sand, loose, poorly sorted, brown, fine Sand, medium Sand, loose	0.0 0.0
4	1639068	75		As Above; mottled at bottom	0.0
	1639069			Grey, brown, medium SAND and fine Sand, moist, loose, poorly sorted	0.0
8	1639070	75		As Above; wet	0.0
	1639071			As Above; light brown	0.0
12	1639072	100		Top 14": As Above; Bottom 10": Olive-grey, varved CLAY, dense	0.0
	1639073			As Above	0.0
16				Bottom of Boring 16'	
20					
24					

Comments:

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Printed On: 9/11/1997

Boring No -SB-199

GEOLOGIC BORING LOG

Project: X-307 Add. Inv. Rubble Piles **LEA Comm No:** 68V7069 **Client:** Pratt & Whitney **Location:** East Hartford	**Start Date** 07/25/97 **End Date** 07/25/97	**Boring ID** **SK-SB-200**

Drilling Contractor: LEA95
Drilling Method: Geoprobe
Sampling Method: Large Bore
Groundwater Observations:
Depth: NR **At:** **Hours**
Depth: **At:** **Hours**

Logged By: B. Tomicic
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 4500
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Prim. Grain Size, Sec. Grain Sizes, Moist, Sort, Spher, Angul, Sed Struct, Density, Cohesive	PID/FID (ppm)
0	1639074	75		Top 4": Organic matter and COBBLES, Bottom 14": Brown/ black, fine SAND, trace (-) medium Sand, dry, loose, poorly sorted	0.0
	1639075	62		Top 8": As Above; brown, fine SAND, some(-) Silt, moderately dense; Bottom 2": mottled	0.0
4	1639076	71		Brown, fine SAND, trace(-) Silt, loose, poorly sorted	0.0
	1639077	71		Top 4": As above; moist, brown/grey, fine SAND, some(+) medium Sand, wet, poorly sorted	0.0
8	1639078	75		As Above	0.0
	1639079	79		As Above	0.0
12	1639080	96		Top 19": As Above; Bottom 4": Olive-grey, varved CLAY, dense	0.0
				Bottom of Boring 14'	
16					
20					
24					

Comments: Large bore sampling method only allowed for ? sample recovery (1/2" diameter), only (jar packed with no headspace for VOC analysis.

Printed On: 9/11/1997

Boring No: SK-SB-200

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GEOLOGIC BORING LOG

Project: X-307 Add. Inv. Rubble Piles **LEA Comm No:** 68V7069 **Client:** Pratt & Whitney **Location:** East Hartford	**Start Date** 07/28/97 **End Date** 07/28/97	**Boring ID** **SK-SB-201**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: NR **At:** **Hours**
Depth: **At:** **Hours**

Logged By: B. Tomicic
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Prim. Grain Size, Sec. Grain Sizes, Moist, Sort, Spher, Angul, Sed Struct, Density, Cohesive	PID/FID (ppm)
0	1639081	75		Top 2": Process stone, coarse GRAVEL, trace fine Gravel; Bottom 34": Yellowish brown to light yellowish brown, fine SAND, trace medium Sand, trace Silt, dry to slightly moist, loose	0.0
	1639082				0.0
4	1639083	54	1	Top 5": Yellowish brown, fine to very fine SAND, trace Silt, slightly moist, loose; Middle 4": Light yellowish brown, fine to medium SAND, slightly moist, loose; Bottom 11": Same as top 5": moist, loose	0.0
	1639084				
	1639085				0.0
8	1639086	42		Top 6": Dark brown, SILT, trace organic matter, wet, loose; Bottom 14": Greyish brown to grey, SILT, little fine Sand, wet, loose; trace organic matter	0.0
	1639087				0.0
12	1639088	88		Top 8": Yellowish brown, fine SAND, trace medium Sand, trace organic matter, wet, loose; Middle 22": Greyish brown, fine(+) to very fine Sand, wet, loose; Bottom 12": Yellowish brown, fine to coarse SAND, wet, loose	0.0
	1639089				0.0
16				Bottom of Boring at 16'	
20					
24					

Comments:

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GEOLOGIC BORING LOG

Project: X-307 Add. Inv. Rubble Piles **LEA Comm No:** 68V7069 **Client:** Pratt & Whitney **Location:** East Hartford	**Start Date** 07/28/97 **End Date** 07/28/97	**Boring ID** **SK-SB-202**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Prim. Grain Size, Sec. Grain Sizes, Moist, Sort, Spher, Angul, Sed Struct, Density, Cohesive	PID/FID (ppm)
0	1639091	67		Top 3": Organic debris; Bottom 29": Yellowish brown to strong brown, fine SAND, trace Silt, trace medium Sand, dry to slightly moist, loose, trace process stone, fine and coarse Gravel top 5"	2.0
	1639092				2.0
4	1639093	58		Top 23": Strong brown, fine(+) to very fine SAND, trace Silt, trace medium Sand, slightly moist to moist, loose	1.5
	1639094				1.5
8	1639095	75		Top 5": Yellowish brown, fine to medium SAND, trace Silt, moist, loose; Next 4": Reddish brown, fine to very fine SAND, moist, loose; Next 12": Light yellowish brown, fine SAND, trace medium Sand, moist to wet, loose; Bottom 15": Yellowish brown, fine SAND, trace medium Sand, wet, loose	1.1
	1639096				0.9
12	1639097	67		Top 22": Brown, fine to very fine SAND, wet, lo9ose; Bottom 10": Brown, fine(+) to medium SAND, trace coarse Sand, wet, loose	4.5
	1639098				4.2
16				Bottom of Boring at 16'	
20					
24					

Comments:

Printed On: 11/14/1997

Boring No: SK-SB-202

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GEOLOGIC BORING LOG

Project: X-307 Add. Inv. Rubble Piles **LEA Comm No:** 68V7069 **Client:** Pratt & Whitney **Location:** East Hartford	**Start Date** 07/28/97 **End Date** 07/28/97	**Boring ID** **SK-SB-203**
Drilling Contractor: LEA **Drilling Method:** Geoprobe **Sampling Method:** Macro Core **Groundwater Observations:** **Depth:** At: Hours **Depth:** At: Hours	**Logged By:** J. Trzaski **Drilling Foreman:** D. Brisson **Drill Rig:** Geoprobe 5400 **Surface Elevation:** **Northing:** **Easting:**	

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Prim. Grain Size, Sec. Grain Sizes, Moist, Sort, Spher, Angul, Sed Struct, Density, Cohesive	PID/FID (ppm)
0	1639099	67		Top 5": Brown, fine SAND, trace Silt with fine and coarse process stone Gravel, little organic matter; Bottom 27"; Brown, fine to very fine SAND, trace Silt, trace medium Sand, dry to slightly moist, loose to moderately dense	10.5
	1639100				2.1
4	1639101	75		Brown, fine to very fine SAND, trace to little Silt, slightly moist to moist, loose to moderately dense, occasional black staining at 12-16", orange modeling t 24-36'	3.6
	1639102				1.3
8	1639103	62		Yellowish brown to greyish brown, fine to medium SAND grading to fine to medium SAND, trace coarse Sand, moist to wet, loose	9.0
	1639104				7.,6
12	1639105	67		Top 6": Yellowish brown, fine to medium SAND, trace coarse Sand, wet, loose; Bottom 26": Brown to light olive3 brown, fine to very fine SAND, wet, loose, micaceous	5.0
	1639106				4.1
16				Bottom of Boring at 16'	
20					
24					

Comments:

Printed On: 11/14/1997

Boring No: SK-SB-203

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GEOLOGIC BORING LOG

Project: X-307 Add. Inv. Rubble Piles **LEA Comm No:** 68V7069 **Client:** Pratt & Whitney **Location:** East Hartford	**Start Date** 07/28/97 **End Date** 07/28/97	**Boring ID** **SK-SB-204**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Prim. Grain Size, Sec. Grain Sizes, Moist, Sort, Spher, Angul, Sed Struct, Density, Cohesive	PID/FID (ppm)
0	1639107	75		Top 6": Brown, fine to medium SAND, trace Silt, trace process stone, fine and coarse Gravel, trace organic matter, dry, loose; Bottom 30": Yellowish brown, fine SAND, trace Silt, trace medium Sand, slightly moist, loose	3.0
	1639108				2.4
4	1639109	58		Top 8": Same as above last 30"; Bottom 20": Strong brown, fine to medium SAND, moist, loose	1.6
	1639110				1.9
8	1639111	79		Top 4": Same as above last 20"; Next 6": Reddish brown, fine to very fine SAND, moist, loose; Next 8": Yellowish brown, fine SAND, trace medium Sand, moist, loose; Next 4": Grey, SILT, trace fine to very fine Sand, moist, loose; Bottom 16": Greyish brown, fine to medium SAND, trace coarse Sand, wet, loose	3.2
	1639112				1.9
12	1639113	79		Yellowish brown, fine(+) to medium SAND, trace coarse Sand, wet, loose	2.3
	1639114				4.6
16				Bottom of Boring at 16'	
20					
24					

Comments:

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Printed On: 11/14/1997

Boring No: SK-SB-204

GEOLOGIC BORING LOG

Project: X-307 Add. Inv. Rubble Piles
LEA Comm No: 68V7069
Client: Pratt & Whitney
Location: East Hartford

Start Date 07/23/97
End Date 07/23/97

Boring ID SK-SB-205

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Prim. Grain Size, Sec. Grain Sizes, Moist, Sort, Spher, Angul, Sed Struct, Density, Cohesive	PID/FID (ppm)
0	1639033	88		Top 2": Organic debris; Middle 5": Yellowish brown, SILT with fine to very fine Sand, some organic matter, dry, loose; Bottom 35": Brownish yellow to pale brown, fine to very fine SAND, trace Silt, dry to slightly moist, loose, trace organic matter	25.3
	1639034				23.2
	1639035				
4	1639036	88		Top 4": Same as above last 35"; Next 5": Light yellowish brown, fine SAND, trace medium Sand, moist, loose; Next 3": Same as top 4"; Bottom 30": Light yellowish brown to yellowish brown, fine to medium SAND, trace coarse Sand, moist to wet, loose, wet at 7'	
	1639037				
8	1639038	75		Top 24": Yellowish brown, fine(+) to medium SAND, trace(-) coarse Sand, wet, loose; Bottom 12": Yellowish brown, medium to fine SAND, coarse Sand, wet, loose	
	1639039				
12	1639040	71		Top 7": Yellowish brown, fine to medium SAND, trace(-) coarse Sand, wet, loose; Bottom 27": Grey, CLAY, little brown, fine to very fine Sand and Silt, wet, loose, thinly laminated	
				Bottom of Boring at 16'	
16					
20					
24					

Comments:

Printed On: 11/14/1997

Boring No -SB-205

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GEOLOGIC BORING LOG

Project: X-307 Add. Inv. Rubble Piles **LEA Comm No:** 68V7069 **Client:** Pratt & Whitney **Location:** East Hartford	**Start Date** 07/23/97 **End Date** 07/23/97	**Boring ID** SK-SB-206

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: NR **At:** **Hour**
Depth: **At:** **Hours**

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Prim. Grain Size, Sec. Grain Sizes, Moist, Sort, Spher, Angul, Sed Struct, Density, Cohesive	PID/FID (ppm)
0	1639042 1639043	92		Top 2": Brown, fine SAND, little organic matter, dry, loose; Middle 38": Brown to reddish brown, fine SAND, little medium Sand, trace coarse Sand, trace, fine and coarse Gravel, dry to slightly moist, moderately dense; Bottom 4": Light yellowish brown, fine(+) to medium SAND, slightly moist, loose; Last 2": Black bituminous asphalt	
4	1639044 1639045	88		Top 14": Brown, fine SAND, trace medium Sand, trace Silt, moist, loose; Next 12": Dark brown to black, SILT, little organic matter, moist, dense; Next 2": Brownish yellow, SILT with very fine Sand; Bottom 14": Grey, SILT, trace fine Sand, wet, moderately dense	
8	1639046 1639047	79		Brown to yellowish brown, fine SAND, trace medium Sand, wet, loose, slight iron staining throughout	
12	1639048 1639049	96		Top 12": Orange brown, fine to coarse SAND, trace pea-size Gravel, wet, loose, iron staining throughout; Next 10": Light olive brown, fine to medium SAND, trace coarse Sand, wet, loose; Bottom 24": Grey, CLAY, trace Silt and fine Sand, wet, loose, thinly laminated	
16				Bottom of Boring at 16'	
20					
24					

Comments:

Printed On: 11/14/1997

Boring No: SK-SB-206

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GEOLOGIC BORING LOG

Project: X-307 Add. Inv. Rubble Piles **LEA Comm No:** 68V7069 **Client:** Pratt & Whitney **Location:** East Hartford	**Start Date** 07/23/97 **End Date** 07/23/97	**Boring ID** **SK-SB-207**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: NR **At:** **Hours**
Depth: **At:** **Hours**

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Prim. Grain Size, Sec. Grain Sizes, Moist, Sort, Spher, Angul, Sed Struct, Density, Cohesive	PID/FID (ppm)
0	1639050 1639051	92		Top 22": Brown fine SAND, some Silt, trace coarse Sand, trace asphalt pieces, dry to slightly moist, moderately dense	
4	1639052 1639053	83		Top 6": Same as above last 22"; Middle 3": Reddish brown, very fine SAND, moist, loose; Bottom 31": Light yellowish brown to yellowish brown, fine SAND, trace medium Sand, moist to wet, loose, wet at 7'	
8	1639054 1639055	75		Top 20": Yellowish brown, fine to medium SAND, wet, loose; Bottom 16": Light yellowish brown, fine to medium SAND, wet, loose, micaceous	
12	1639056 1639057	92		Top 8": Brown, fine(+) to very fine SAND, wet, loose, micaceous; Bottom 36": Grey, CLAY, trace brown Silt and very fine Sand, wet, loose, thinly laminated	
16				Bottom of Boring at 16'	
20					
24					

Comments:

Printed On: 11/14/1997

Boring No: SK-SB-207

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GEOLOGIC BORING LOG

Project: Cryogenics Area Add. Inv. **LEA Comm No:** 68V7070 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 07/30/97 **End Date** 07/30/97	**Boring ID** **SK-SB-208**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours ▽
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1639663	88		Punched thru 5" Asphalt; Top 5": Brown, fine to medium SAND, some process stone, fine and coarse Gravel, little asphalt pieces, dry, loose; Bottom 37": Yellowish brown, fine SAND, trace Silt, trace medium Sand, dry to moist, loose; wet at bottom	2.7
	1639664				2.5
4	1639665	54		Top 6": Greyish brown, fine SAND, trace medium Sand, wet, loose; Middle 8": Grey, SILT, with very fine to fine Sand, wet, moderately dense; Bottom 12": Same as top 6", trace Silt	3.2
	1639666				2.8
8	1639667	83		Top 8": As Above, last 12"; Middle 12": Grey to greyish brown, fine to very fine SAND, wet, loose; Bottom 20": Greyish brown to yellowish brown, fine to medium SAND, trace coarse Sand, wet, loose	3.0
	1639668 1639669				4.0
12	1639670	92		Top 5": As Above, last 20": Next 10": Light olive brown, fine to very SAND, wet, loose; Next 10": Yellowish brown, medium to fine SAND, trace coarse Sand, wet, loose; Bottom 19": Grey, CLAY, trace very fine Sand and Silt, wet, moderately dense, thinly laminated	1.1
	1639671				1.3
16				Bottom of Boring at 16'	
20					
24					

Comments:

LEA
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Printed On: 1/26/1998

Boring No: SK-SB-208

GEOLOGIC BORING LOG

Project: Cryogenics Area Add. Inv. **LEA Comm No:** 68V7070 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 07/30/97 **End Date** 07/30/97	**Boring ID** **SK-SB-209**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours ▽
Depth: At: Hours ▽

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1639672	62		Top 5": Brown, fine SAND, little Silt, trace medium and coarse Sand, trace organic matter, dry, loose; Bottom 25": Yellowish brown, fine SAND, trace coarse Sand, trace medium Sand, trace bituminous asphalt (top 8" of 25" interval) dry to moist, loose	2.4
	1639673				2.0
4	1639674	62		Top 14": Yellowish brown to greyish brown, fine SAND, trace Silt, trace medium Sand, moist to wet, loose (wet at 6"); Middle 4": Grey, SILT, with very fine to fine SAND; Bottom 12": Greyish brown, fine SAND, trace Silt, trace medium Sand, wet, loose	3.0
	1639674				3.4
8	1639676	100		Top 6": Dark brown and black-stained, fine SAND, trace Silt, trace medium Sand, trace organic matter, wet, loose; Next 16": Greyish brown, fine SAND, trace medium Sand, wet, loose; Next 12": Greyish brown, fine to very fine SAND, wet, loose; Bottom 14": Yellowish brown, medium to fine SAND, trace coarse Sand, wet, loose	3.0
	1639677				2.8
12	1639678	75		Top 10": Light olive brown, fine to very fine SAND, wet, loose; Middle 18": Yellowish brown, medium to fine SAND, trace coarse Sand, wet, loose; Bottom 8": Grey, CLAY, trace brown, fine to very fine Sand, wet, moderately dense, thinly laminated	1.4
	1639679				1.5
16				Bottom of Boring at 16'	
20					
24					

Comments:

Printed On: 1/26/1998

Boring No: SK-SB-209

LEA
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GEOLOGIC BORING LOG

Project: Cryogenics Area Add. Inv. **LEA Comm No:** 68V7070 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 07/30/97 **End Date** 07/30/97	**Boring ID** **SK-SB-210**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1639680	75		Top 6": Brown, fine SAND, little Silt, trace coarse Sand, trace concrete pieces, trace organic matter, dry, loose; Bottom 30": Yellowish brown, fine SAND, trace medium Sand, trace(-) Silt, dry to moist, loose	1.7
	1639681				1.4
4	1639682	75		Top 26": Yellowish brown, fine SAND, trace medium Sand, moist to wet, loose, wet at 10"; Middle 4": Grey, SILT, with fine and very fine Sand, wet, moderately dense; Bottom 6": Greyish brown, fine SAND, trace Silt, trace medium Sand, wet, loose	2.2
	1639683				1.8
8	1639684	96		Top 29": Yellowish brown to greyish brown, fine SAND, trace(-) medium Sand, wet, loose; Middle 5": Grey, fine to very fine SAND, wet, loose; Bottom 12": Yellowish brown, medium to fine SAND, trace coarse Sand, wet, loose	1.6
	1639685				1.5
12	1639686	83		Top 20": Light olive brown, fine to very fine SAND, wet, loose; Middle 12": Yellowish brown, medium to fine SAND, trace coarse Sand, wet, loose; Bottom 8": Grey, CLAY, trace brown, fine to very fine Sand and Silt, wet, moderately dense, thinly laminated	1.1
	1639687				1.5
16				Bottom of Boring at 16'	
20					
24					

Comments:

Printed On: 1/26/1998

Boring No: SK-SB-210

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GEOLOGIC BORING LOG

Project: Cryogenics Area Add. Inv. **LEA Comm No:** 68V7070 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 08/01/97 **End Date** 08/01/97	**Boring ID** **SK-SB-211**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: NR **At:** **Hours**
Depth: **At:** **Hours**

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1639698	79		Top 6": Process stone, fine and coarse GRAVEL, little bituminous asphalt; Bottom 32": Yellowish brown, fine SAND, trace Silt, trace medium Sand, dry to slightly moist, loose; slight coarsening downward	3.2
	1639699				3.4
4	1639700	67		Top 16": As Above, Greyish brown, moist to wet; Middle 6": Grey, SILT, with fine to very fine Sand, wet, moderately dense; Bottom 10": Same as top 16", wet	2.2
	1639701				1.8
8	1639702	75		Greyish brown to yellowish brown, fine to medium SAND, wet, loose	1.8
	1639703 1639704				2.0
12	1639705	79		Top 30": Yellowish brown, fine to medium SAND, trace coarse Sand, wet, loose; Bottom 8": Grey, CLAY, little fine to very fine Sand and Silt, wet, dense, thinly laminated	1.4
	1639706				1.6
16				Bottom of Boring at 16'	
20					
24					

Comments:

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GEOLOGIC BORING LOG

Project: Cryogenics Area Add. Inv. **LEA Comm No:** 68V7070 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 08/01/97 **End Date** 08/01/97	**Boring ID** **SK-SB-212**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: **At:** **Hours**
Depth: **At:** **Hours**

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1638707	67		Top 5": Process stone, fine and coarse GRAVEL, little bituminous asphalt; Bottom 27": Strong brown to yellowish brown, fine SAND, trace silt, trace medium Sand, dry to slightly moist, loose; slight coarsening downward	2.0
	1639708				2.1
4	1639709	58		Top 18": Yellowish brown to greyish brown, fine SAND, trace medium Sand, moist to wet, loose; Middle 5": Grey, SILT, with fine to very fine Sand, wet, moderately dense; Bottom 5": Greyish brown, fine(+) to very fine SAND, wet, loose	1.6
	1639710				1.5
8	1639711	83		Top 12": Greyish brown, fine SAND, trace medium Sand, wet, loose; Middle 12": Greyish brown to grey, fine to very fine SAND, wet, loose; Bottom 16": Yellowish brown to greyish brown, fine to medium SAND, trace coarse Sand, wet, loose	2.1
	1639712				1.6
12	1639713	88		Top 14": Light olive brown, fine(+) to very fine SAND, wet, loose; Middle 18": Yellowish brown, fine to medium SAND, trace coarse Sand, wet, loose, slight coarsening downward; Bottom 10": Grey, CLAY, little fine to very fine Sand, wet, dense, thinly laminated	1.5
	1639714				0.8
16				Bottom of Boring at 16'	
20					
24					

Comments:

Printed On: 1/26/1998

Boring No: SK-SB-212

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GEOLOGIC BORING LOG

Project: Cryogenics Area Add. Inv. **LEA Comm No:** 68V7070 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 08/01/97 **End Date** 08/01/97	**Boring ID** **SK-SB-213**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: NR **At:** **Hours**
Depth: **At:** **Hours**

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1639715	71		Top 4": Dark yellowish brown, SILT, trace fine Sand, trace organic matter, slightly moist, moderately dense; Bottom 26" : Yellowish brown to reddish brown, fine SAND, trace medium Sand, trace coarse Sand, slightly moist, loose, Cobble at 30"	2.4
	1639716				2.0
4	1639717	58		Top 14": Yellowish brown, fine SAND, moist to wet, loose; Next 3": Reddish brown, fine to very fine SAND, wet, loose; Next 3": Grey, SILT, with fine to very fine Sand, wet, moderately dense; Bottom 8": Greyish brown, fine SAND, wet, loose	1.5
	1639718				1.3
8	1639719	75		Top 26": Greyish brown, fine SAND, trace medium Sand, wet, loose; Middle 6": Grey to greyish brown, fine to very fine SAND, wet, loose; Bottom 4": Same as top 26"	1.5
	1639720				2.0
12	1639721	83		Top 6": Light olive brown, fine to very fine SAND, wet, loose; Middle 24": Yellowish brown, fine to medium SAND, trace coarse Sand, wet, loose; Bottom 10": Grey, CLAY, trace fine and very fine Sand, wet, dense, thinly laminated	1.7
	1639722				0.7
16				Bottom of Boring at 16'	
20					
24					

Comments:

Printed On: 1/26/1998

Boring No -SB-213

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GEOLOGIC BORING LOG

Project: Linde Gas Add. Inv. **LEA Comm No:** 68V7087 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 08/06/97 **End Date** 08/06/97	**Boring ID** **SK-SB-214**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1640122	75		Top 4": Asphalt pieces; Bottom 32": Yellowish brown to reddish brown, fine to medium SAND, trace coarse Sand, little fine and coarse Gravel (bottom 14"), slightly moist to moist, loose to moderately dense	1.0
	1640123				1.4
4	1640124	83		Top 30": Yellowish brown to greyish brown, fine SAND, trace Silt, trace medium Sand, moist to wet, loose, wet at 20"; Bottom 10": Greyish brown, fine to medium SAND, trace coarse Sand, wet, loose	2.0
	1640125				1.9
	1640126				
8	1640127	62		Top 18": Greyish brown to yellowish brown, fine(+) to medium SAND, wet, loose; Bottom 12": Yellowish brown, fine to medium SAND, trace(+) coarse Sand, wet, loose	1.3
	1640128				1.3
12	1640129	79		Top 16": Same as above last 12", trace(-) coarse Sand; Bottom 22": Grey, CLAY, trace brown fine and very fine Sand and Silt, wet, moderately dense, thinly laminated	0.9
	1640130				1.0
16				Bottom of Boring at 16'	
20					
24					

Comments:

Printed On: 2/10/1998

Boring No: SK-SB-214

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GEOLOGIC BORING LOG

Project: Linde Gas Add. Inv. **LEA Comm No:** 68V7087 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 08/06/97 **End Date** 08/06/97	**Boring ID** **SK-SB-215**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1640131	88		Top 5": Grey, fine SAND, with bituminous asphalt, trace Silt, trace organic matter; Bottom 37": Reddish brown, fine to medium SAND, some fine and coarse Gravel, little coarse Sand, slightly moist to moist, moderately dense, Fill	1.3
	1640132				1.4
4	1640133	79		Top 27": Gey, fine to very fine SAND, trace Silt, trace(-) organic matter, moist to wet, dense to loose, wet at 25"; Middle 5": Reddish brown, very fine SAND, wet, loose; Bottom 7": Greyish brown, fine SAND, trace medium Sand, wet, loose	1.6
	1640134				1.3
8	1640135	71		Greyish brown to yellowish brown, fine to medium SAND, trace(-) coarse Sand, wet, loose, slight coarsening downward, slight black staining at 20-34"	1.1
	1340136				1.0
12	1640137	71		Top 8": Yellowish brown, fine to coarse SAND, wet, loose; Middle 12": Yellowish brown, fine SAND, trace medium Sand, wet, loose, micaceous; Bottom 14": Grey, CLAY, trace brown, fine to very fine Sand and Silt, wet, moderately dense, thinly laminated	1.0
	1640138				0.9
16				Bottom of Boring at 16'	
20					
24					

Comments:

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GEOLOGIC BORING LOG

Project: Linde Gas Add. Inv. **LEA Comm No:** 68V7087 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 08/06/97 **End Date** 08/06/97	**Boring ID** **SK-SB-216**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1640139	88		Top 14": Yellowish brown, fine SAND, trace medium Sand, trace Silt, trace organic matter, slightly moist, loose; Bottom 28" Reddish brown, fine to medium SAND, some fine and coarse Gravel, little coarse Sand, slightly moist to moist, moderately dense, Fill	1.7
	1640140				1.8
4	1640141	62		Same as above, last 28", moist to wet, wet at 20"	1.5
	1640142				1.8
8	1640143	79		Top 8": Greyish brown, fine to medium SAND, trace(-) coarse Sand, wet, loose; Middle 20": Light olive brown, very fine SAND, wet, loose; Bottom 10": Yellowish brown, fine to medium SAND, trace coarse Sand, wet, loose	1.9
	1640144				1.6
12	1640145	71		Top 17": Yellowish brown, fine to coarse SAND, wet, loose; Bottom 17": Grey CLAY, trace brown, fine to very fine Sand and Silt, wet, moderately dense, thinly laminated	1.1
	1640146				1.2
16				Bottom of Boring at 16'	
20					
24					

Comments:

Printed On: 2/10/1998

Boring No: SK-SB-216

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GEOLOGIC BORING LOG

Project: Linde Gas Add. Inv. **LEA Comm No:** 68V7087 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 08/07/97 **End Date** 08/07/97	**Boring ID** **SK-SB-217**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: 5.2 **At:** 0 **Hours**
Depth: **At:** **Hours**

Logged By: F. Postma
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1640162	90		Top 2': Brownish yellow, fine SAND, moist, loose; Bottom 0.7': Red, fine SAND, little coarse Sand, little medium Sand, trace fine Gravel, moist, moderately dense	7.8
	1640163			Red to reddish brown, fine SAND, little coarse Sand, little medium Sand, trace fine Gravel, moist, moderately dense, petroleum(?) odor	18.7
4	1640164	80		Top 6": As Above; 4.6-5.2': Olive, SILT, some fine Sand, moist, moderately dense, 5.2-7.0': Light olive brown, medium SAND, some fine Sand, trace coarse Sand, loose, wet	9.4
	1640165			As Above	9.7
8	1640166	90		As Above	7.0
	1640167			Brown to olive brown, fine SAND, trace medium Sand, wet, moderately dense, stratified	11.0
12	1640168	80		Top 1': As Above, mottles at 12.8-13.1; Bottom 0.8': Olive-brown to grey, CLAY, trace Silt, wet, loose, fine Sand lenses	4.6
	1640169			As Above	4.7
16				Bottom of Boring at 16'	
20					
24					

Comments:

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Printed On: 2/10/1998

Boring No -SB-217

GEOLOGIC BORING LOG

Project: Linde Gas Add. Inv. **LEA Comm No:** 68V7087 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 08/07/97 **End Date** 08/07/97	**Boring ID** **SK-SB-218**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: 5.1 **At:** 0 **Hours**
Depth: **At:** **Hours**

Logged By: F. Postma
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1640170	90		Top 6": Yellow, fine SAND, moist, loose; Bottom 1.4': Red to reddish yellow, medium SAND, some coarse Sand, little fine Gravel, little fine Sand, moist, moderately dense, angular, brick fragments	10.5
	1640171 1640172	90		As Above	11
4	1640173	90		Top 8": As Above; Bottom 1.1': Olive brown, fine SAND, little medium Sand, wet, loose	16.5
	1640174	90		As Above	5.5
8	1640175	80		As Above, Mottles at 9.6'	12.8
	1640176	80		As Above	12.1
12	1640177	40		As Above	14.5
	1640178	40		Olive brown to grey, CLAY, wet, loose, rhythmites, fine Sand lenses	16.0
16				Bottom of Boring at 16'	
20					
24					

Comments:

Printed On: 2/10/1998

Boring No: SK-SB-218

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GEOLOGIC BORING LOG

Project: Linde Gas Add. Inv. **LEA Comm No:** 68V7087 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 08/07/97 **End Date** 08/07/97	**Boring ID** **SK-SB-219**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: 5.5 **At:** 0 **Hours**
Depth: **At:** **Hours**

Logged By: F. Postma
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1640179	60		Yellowish brown, fine SAND, little medium Sand, moist, loose	17.2
	1640180	60		Red to brownish red, medium SAND, with fine Sand, trace coarse Sand, trace(-) fine Sand, moist, dense	17.3
4	1640181	80		Top 6": As Above; Bottom 1.1': Olive brown to brown, fine SAND, some medium Sand, trace coarse Sand, wet, loose, stratified, mottles, petroleum(?) odor	5.4
	1640182	80		As Above, petroleum(?) odor	215
8	1640183	70		Brown to light brown, fine SAND, with medium Sand, trace coarse Sand, loose, wet, stratified	23.1
	1640184	70		As Above	15.8
12	1640185	90		Yellowish brown, medium SAND, some coarse Sand, little fine Sand, wet, loose, stratified, subangular grains	10.9
	1640186	90		Top 1.2': As Above; Bottom 0.7': Reddish brown to grey, CLAY, trace Silt, trace(-) fine Sand, wet, loose, rhythmites, fine Sand lenses	7.8
16				Bottom of Boring at 16'	
20					
24					

Comments:

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Printed On: 2/10/1998

Boring No. SK-SB-219

GEOLOGIC BORING LOG

Project: Linde Gas Add. Inv. **LEA Comm No:** 68V7087 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 08/07/97 **End Date** 08/07/97	**Boring ID** **SK-SB-220**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: 2 **At:** 0 **Hours**
Depth: **At:** **Hours**

Logged By: F. Postma
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1640187	90		Brown, medium SAND, some fine Sand, moist, loose, subangular	9.4
	1640188	90		Reddish brown to brown, fine SAND, with medium Sand, wet, loose	9.5
4	1640189	60		Brown to olive black, medium SAND, some fine Sand, trace(-) Silt, wet, loose, sapric organic matter, Hydrogen Sulfide odor	7.2
	1640190	60		Light brown to reddish brown, medium SAND, little coarse Sand, little fine Sand, wet, loose, stratified	5.5
8	1640191	70		Reddish brown, medium SAND, some coarse Sand, trace fine Sand, wet, loose	27.0
	1640192	70		Light brown to olive brown, fine SAND, trace medium Sand, wet, moderately dense	12.9
12	1640193	90		Reddish yellow, medium SAND, little coarse Sand, trace(+) fine Sand, wet, loose, subangular	9.6
	1640194	90		Top 8": As Above; Bottom 1': Olive to grey, CLAY, fine to coarse Silt, trace fine Sand, wet, loose, rhythmites, fine Sand lenses	11.6
16				Bottom of Boring at 16'	
20					
24					

Comments:

Printed On: 2/10/1998

Boring No: SK-SB-220

LEA
LOUREIRO ENGINEERING ASSOCIATES, PC
100 Northwest Drive, Plainville, Connecticut, 06062, Phone(203)747-6181 FAX (203)747-8822

GEOLOGIC BORING LOG

Project: Linde Gas Add. Inv. **LEA Comm No:** 68V7087 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 08/08/97 **End Date** 08/08/97	**Boring ID** SK-SB-221

Drilling Contractor: LEA
Drilling Method: Macro Core
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours ▽
Depth: At: Hours ▽

Logged By: J. Trzaski
Drilling Foreman: J. Sweeton
Drill Rig: Geoprobe
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1640201	75		Drilled through 4" concrete; Top 2": Concrete debris; Middle 6": Dusky-red, fine to coarse SAND, trace fine and coarse Gravel, trace Silt, dry, loose; Bottom 28": Yellowish-brown, fine to medium SAND, trace Silt, slightly moist to moist, loose	2.2
	1640202				2.6
4	1640203	83		Top 8": Sames as last 28"; Bottom 32": Red, fine to coarse SAND, some fine and coarse Gravel, trace Silt, Cobble at 16", wet top 8", slightly moist bottom 24", moderately dense, yellow brick material at 16"	2.8
	1640204 1640205				5.9
8	1640206	83		Top 18"; As Above last 32", Next 8" yellowish-brown, wet bottom 10"; Bottom 12": Concrete	2.6
	1640207				3.2
12				Refusal at 11.5'	
16					
20					
24					

Comments:

Printed On: 2/10/1998

Boring No SK-SB-221

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GEOLOGIC BORING LOG

Project: Linde Gas Add. Inv. **LEA Comm No:** 68V7087 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 08/08/97 **End Date** 08/08/97	**Boring ID** SK-SB-222

Drilling Contractor: LEA
Drilling Method: Macro Core DP
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: J. Sweeton
Drill Rig: Geoprobe
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1690210	71		Punched through 3" Asphalt; Top 30": Yellowish-brown, fine to medium SAND, trace Asphalt pieces, little coarse Sand, trace Silt, slightly moist to moist, loose; Bottom 4":	4.1
	1690211			Dusky-red, fine to coarse SAND, little fine and coarse Gravel, trace Silt, moist, loose	3.7
4	1690212	58		Top 26": As Above last 4", moist to wet, moderately dense, wet at 5"; Bottom 2": Concrete, strong petroleum(?) odor	3.6
	1690213				200
8				Refusal at 8'	
12					
16					
20					
24					

Comments:

Printed On: 2/10/1998

Boring No: SK-SB-222

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GEOLOGIC BORING LOG

Project: Linde Area Add. Inv. **LEA Comm No:** 68V7087 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 08/11/97 **End Date** 08/11/97	**Boring ID** **SK-SB-224**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1640232	83		Drilled through 4" Concrete; Top 6": Concrete pieces and debris; Bottom 34": Dark yellowish-brown, fine SAND, little medium Sand, trace Silt, trace coarse Sand, slightly moist, loose, reddish-brown Cobble at 20", coal pieces at bottom 6"	NR
	1640233				NR
4	1640234	83		Top 4": Same as last 34"; Bottom 36"; Red to reddish-brown, fine to coarse SAND, little fine and coarse Gravel, trace Silt, wet from 6-14", slightly moist, 14-36", moderately dense	NR
	1640235				NR
	1640236				NR
8	1640237	83		Top 20": Same as last 36"; next 4": Brown, fine(+) to medium SAND, wet, loose; next 8": Greyish-brown, fine to very fine SAND, trace Silt, wet, loose; Bottom 8": Brown, fine SAND, little medium Sand, wet, loose	NR
	1640238				NR
12	1640239	71		Top 32": Dark yellowish-brown, fine to very fine SAND, trace Silt, wet, loose; Bottom 2": Yellowish-brown, fine to coarse SAND, trace Silt, wet, loose	NR
	1640240				NR
16				Bottom of Boring 16'	
20					
24					

Comments:

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Printed On: 2/2/1998

Boring No. SK-SB-224

GEOLOGIC BORING LOG

Project: Linde Area Add. Inv. **LEA Comm No:** 68V7087 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 08/11/97 **End Date** 08/11/97
Boring ID	**SK-SB-225**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: **At:** **Hours**
Depth: **At:** **Hours**

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1640241	100		Drilled through 4" Concrete; Top 4": Concrete pieces and debris; Next 8": Reddish-brown, fine to coarse SAND, little fine and coarse Gravel, trace Silt, dry, loose; Bottom 36": Yellowish-brown, fine SAND, little medium Sand, trace coarse Sand, trace, fine and coarse Gravel, dry to slightly moist, loose	NR
	1640242	100			NR
4	1640243	71		Top 6": ;Yellowish-brown, fine to medium SAND, trace coarse Sand, trace Silt, moist to wet, loose; Bottom 28": Reddish-brown, fine to coarse SAND, little fine and coarse Gravel, trace Silt, wet; Top 8": Slightly moist; Bottom 20": moderately dense	NR
	1640244	71			NR
8	1640245	88		Top 10": Same as last 28", brown Quartz, Cobble at 6"; Next 20": Greyish-brown, fine SAND, little medium Sand, trace Silt, wet, loose; Next 6": Grey, fine to very fine SAND, trace Silt; Bottom 5": Yellowish-brown, fine SAND(-), trace fibric organic matter, wet, loose, micaceous	NR
	1640246	88			NR
12				Refusal at 12'	
16					
20					
24					

Comments:

Printed On: 2/2/1998

Boring No: SK-SB-225

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GEOLOGIC BORING LOG

Project: Linde Area Add. Inv. **LEA Comm No:** 68V7087 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 08/11/97 **End Date** 08/11/97	**Boring ID** **SK-SB-226**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1640249 1640250	100		Drilled through 3" Concrete; Top 2": Concrete pieces and debris; Middle 10": Reddish-brown, fine to medium SAND, little fine and coarse Gravel, trace coarse Sand, trace Silt, dry, loose; Bottom 36": Yellowish-brown, fine SAND, little medium Sand, trace coarse Sand, trace, fine and coarse Gravel, slightly moist, loose to medium dense	NR
4	1640251 1640253	67		Top 8": Same as last 36", wet, loose; Bottom 24": Reddish-brown, fine to coarse SAND, little fine and coarse Gravel, trace Silt, wet; Top 12": moist; Bottom 12": moderately dense	NR NR
8	1640254 1640255	71		Top 10": Same as last 24"; Bottom 24": Greyish-brown, fine(+) to very fine SAND, trace medium Sand, trace Silt, moist to wet, loose, wet at 14"; slightly finning downward, slightly petroleum(?) odor at bottom	NR NR
12				Refusal at 12'	
16					
20					
24					

Comments:

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GEOLOGIC BORING LOG

Project: Linda Area Add. Inv. Drum **LEA Comm No:** 68V7088 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 08/12/97 **End Date** 08/12/97	**Boring ID** **SK-SB-227**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours ▽
Depth: At: Hours ▼

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1640379	96		Top 12": Yellowish brown, fine SAND, little Silt, trace fibric organic matter, dry, loose; Bottom 34": Yellowish brown, fine SAND, trace medium Sand, trace Silt, dry to slightly moist, loose	0
	1640380				0
4	1640381	88		Top 10": As above last 34": Middle 20": Light yellowish brown, fine SAND, trace medium Sand, trace Silt, moist, loose; Bottom 12": Dark yellowish brown, fine to medium SAND, trace Silt, wet, loose	0
	1640382 1640383				0
8	1640384	83		Top 16": Dark yellowish brown, fine(+) to medium SAND, trace coarse Sand, trace Silt, wet, loose; Middle 16": Grey, fine to very fine SAND, little Silt, wet, loose; Bottom 8": Same as top 16"	60.0
	1640385				10.0
12	1640386	88		Top 16": Yellowish brown, fine to coarse SAND, trace pea size Sand, trace Silt, wet, loose; Bottom 26": Grey, CLAY, little brown, fine to very fine Sand and Silt, wet to moist, moderately dense, varved	0
	1640387				0
16				Bottom of Borinbg at 16'	
20					
24					

Comments:

Printed On: 2/9/1998

Boring No: SK-SB-227

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GEOLOGIC BORING LOG

Project: Linda Area Add. Inv. Drum **LEA Comm No:** 68V7088 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 08/12/97 **End Date** 08/12/97	**Boring ID** **SK-SB-228**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1640388	62		Top 5": Brown, SILT with fine Sand, some fibric organic matter, dry, loose; Middle 14": Reddish brown, fine to coarse SAND, little fine and coarse Gravel, trace Silt, dry, loose, Fill, 1/2" asphalt layer at bottom; Bottom 11": Brown, fine SAND, trace medium Sand, little Silt, slightly moist, loose	0
	1640389				0
4	1640390	75		Top 20": Yellowish brown, fine SAND, trace Silt, trace medium Sand, slightly moist to moist, loose; Bottom 16": Dark yellowish brown, fine(+) to medium SANBD, wet, loose	0
	1640391				3.0
8	1640392	88		Top 28": Yellowish brown to greyish brown, fine to medium SAND, trace coarse Sand, wet, loose; Middle 6": Grey, fine to very fine SAND, little Silt, wet, loose; Bottom 8": Yellowish brown, fine(+) to medium SAND, wet, loose, slight iron staining	15.0
	1640393				25.0
12	1640394	67		Top 18": Yellowish brown, fine to coarse SAND, trace fine Gravel, wet, loose, slight iron staining at top; Bottom 14": Grey, CLAY, trace brown fine to very fine Sand and Silt, wet, moderately dense, varved	0
	1640395				0.2
16				Bottom of Boring at 16'	
20					
24					

Comments:

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Printed On: 2/9/1998

Boring No. SK-SB-228

GEOLOGIC BORING LOG

Project: Linda Area Add. Inv. Drum **LEA Comm No:** 68V7088 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 08/12/97 **End Date** 08/12/97	**Boring ID** SK-SB-229

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: **At:** **Hours**
Depth: **At:** **Hours**

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1640396	79		Reddish brown, fine to coarse SAND, little fine and coarse Gravel, trace Silt, trace fibric organic matter (top 4"), dry to slightly moist, loose to moderately dense, Fill	0
	1640397				0
4	1640398	75		Light yellowish brown, fine(+) to very fine SAND, trace Silt (20") grading into yellowish brown, fine to medium Sand (16"), slightly moist to wet, loose, wet at 28"	0
	1640399				0.5
8	1640400	50		Top 10": Dark yellowish brown, fine to medium SAND, trace coarse Sand, wet, loose; Middle 8": Grey, fine to very fine SAND, little Silt, wet, loose; Bottom 6": Greyish brown, fine(+) to medium SAND, wet, loose	20.0
	1640401				25.0
12	1640402	50		Top 14": Yellowish brown, fine to coarse SAND, trace fine Gravel, wet, loose; Bottom 10": Grey, CLAY, trace fine to very fine Sand and Silt, wet, moderately dense, varved	0.0
	1640403				3.0
16				Bottom of Boring at 16'	
20					
24					

Comments:

Printed On: 2/9/1998

Boring No: SK-SB-229

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GEOLOGIC BORING LOG

DRAFT

Project: Linda Area Add. Inv. Drum **LEA Comm No:** 68V7088 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 08/12/97 **End Date** 08/12/97	**Boring ID** **SK-SB-230**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1640404	88		Top 8": Pale brown, SILT with fine Sand, trace fibric organic matter, dry, loose; Bottom 34": Light yellowish brown to strong brown, fine SAND, little Silt, trace medium Sand, dry to slightly moist, loose	0
	1640405				0
4	1640406	75		Top 14": Grey to greyish brown, fine(+) to very fine SAND, little Silt, moist, loose, black-staining top 4"; Bottom 22": Yellowish brown, fine SAND, trace medium Sand grading to fine to medium Sand, wet, loose	0
	1640407				0
8	1640408	62		Top 10": Greyish brown, fine to medium SAND, trace coarse Sand, wet, loose; Bottom 20": Grey, very fine to fine SAND, little Silt, wet, loose	60.0
	1640409				6.0
12	1640410	92		Top 30": Dark greyish brown to ytellowish brown, fine to coarse SAND, trace fine Gravel, wet, loose; Bottom 14": Grey, CLAY, trace brown , fine to very fine Sand and Silt, wet, moderately dense, varved	0
	1640411				0
16				Bottom of Boring at 16'	
20					
24					

Comments:

Printed On: 2/9/1998

Boring No -SB-230

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GEOLOGIC BORING LOG

Project: Linda Area Add. Inv. Drum **LEA Comm No:** 68V7088 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 08/12/97 **End Date** 08/12/97	**Boring ID** **SK-SB-231**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: **At:** **Hours**
Depth: **At:** **Hours**

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1640412	83		Top 4": Organic debris and concrete pieces; Middle 16": Pale brown, SILT with fine Sand, trace medium Sand, dry, loose; Bottom 20": Strong brown, fine SAND, trace medium	0
	1640413			Sand, trace Silt, slightly moist, loose	0
4	1640414	60		Top 8": As above last 20"; Middle 10": Light brownish grey, fine to very fine SAND, little Silt, moist, loose; Bottom 6": Yellowish brown, fine(+) to medium SAND,	0
	1640415			trace fibric organic matter, wet, loose	0
8	1640416	62		Top 14": Dark greyish brown, fine to medium SAND, trace coarse Sand, wet, loose; Middle 14": Grey, very fine to fine SAND, little Silt, wet, loose; Bottom 2": Grey, fine	70.0
	1640417			to medium SAND, trace coarse Sand, wet, loose	30.0
12	1640418	92		Top 24": Dark greyish brown to yellowish brown, fine to coarse SAND, trace fine Gravel, wet, loose; Bottom 20": Grey, CLAY, trace fine to very fine Sand and Silt, wet,	3.5
	1640419			moderately dense, varved	7.0
16				Bottom of Boring at 16'	
20					
24					

Comments:

Printed On: 2/9/1998

Boring No: SK-SB-231

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GEOLOGIC BORING LOG

Project: Linda Area Add. Inv. Drum **LEA Comm No:** 68V7088 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 08/12/97 **End Date** 08/12/97	**Boring ID** **SK-SB-232**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours ▽
Depth: At: Hours ▼

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1640420	92		Reddish brown, fine to coarse SAND, some fine and coarse Gravel, trace Silt, dry to slightly moist, loose to moderately dense, Fill	0
	1640421				0
4	1640422	67		Top 14": Light brownish grey, fine to very fine SAND, little Silt, moist, loose; Bottom 18": Greyish brown, fine SAND, trace medium Sand, trace Silt, moist to wet, loose, wet at 6"	0.3
	1640423				2.0
8	1640424	67		Top 14": Greyish brown, medium to fine SAND, trace coarse Sand, wet, loose; Middle 16" Grey, very fine to fine SAND, little Silt, wet, loose; Bottom 2": Grey, fine to medium SAND, trace coarse Sand, wet, loose	30.0
	1640425				100.0
12	1640426	83		Top 14": Dark greyish brown to yellowish brown, fine to medium SAND, wet, loose; Bottom 26": Grey, CLAY, trace fine to very fine SAND and SILT, wet, moderately dense, varved	4.0
	1640427				10.0
16				Bottom of Boring 16'	
20					
24					

Comments:

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GEOLOGIC BORING LOG

Project: Linde Area Add. Inv. UST **LEA Comm No:** 68V7089 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 08/13/97 **End Date** 08/13/97	**Boring ID** **SK-SB-233**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1640469	92		Top 6": Process stone, fine and coarse GRAVEL, with brown, fine Sand and Silt, trace organic matter; Bottom 38": Reddish brown, fine and coarse SAND, little fine and coarse Gravel, trace silt, trace Cobbles, dry to slightly moist, loose to moderately dense, Fill	0
	1640470				0
4	1640471	79		Top 26": Greyish brown, fine(+) to very fine SAND, little Silt, trace medium Sand, slightly moist to wet, loose, wet at 24"; Bottom 12": Reddish grey, fine(+) to medium SAND, trace(-) coarse Sand, wet, loose	0
	1640472 1640473				1.0
8	1640474	29		Reddish grey to grey, fine to medium SAND, trace coarse Sand, wet, loose, with 1" layer Grey, fine Sand at 8"	6.0
					-
12	1640476	54		Top 6": Greyish brown, fine to coarse SAND, wet, loose; Middle 14": Greyish brown, fine(+) to medium SAND, trace(-) coarse Sand, wet, loose; Bottom 6": Grey, CLAY, trace brown, very fine to fine Sand and Silt, wet, moderately dense, varved	0.6
	1640477				10.
16				Bottom of Boring at 16'	
20					
24					

Comments:

Printed On: 2/9/1998

Boring No: SK-SB-233

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GEOLOGIC BORING LOG

Project: Linde Area Add. Inv. UST **LEA Comm No:** 68V7089 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 08/13/97 **End Date** 08/13/97	**Boring ID** SK-SB-234

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1640478	88		Top 2": Organic debris and wood chips; Bottom 40": Reddish brown, fine to coarse SAND, some fine and coarse Gravel, trace silt, trace Cobbles, dry and slightly moist, loose to moderately dense, Fill	0
	1640479				0
4	1640480	75		Top 12": Greyish brown, fine(+) to very fine SAND, trace Silt, moist, loose; Next 3": Orange-stained, fine to medium SAND, moist, loose; Next 2": Same as top 12"; Bottom 19": Reddish grey, medium to fine SAND, trace coarse Sand, wet, loose	0
	1640481				0.2
8	1640482	58		Top 6": Reddish grey, fine SAND, little medium Sand, wet, loose; Middle 8": Reddish grey, fine to coarse SAND, to fibric organic matter, trace fine Gravel, wet, loose; Bottom 14": Olive grey, fine SAND, trace medium Sand, trace silt, wet, loose	1.4
	1640483				3.5
12	1640484	92		Top 24": Olive grey to dark olive grey, fine(+) to coarse SAND, wet, loose; Bottom 20": Grey, CLAY, trace brown, very fine to fine, Sand and Silt, wet, moderately dense, varved	0.2
	1640485				7.0
16				Bottom of Boring at 16'	
20					
24					

Comments:

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GEOLOGIC BORING LOG

Project: Linde Area Add. Inv. UST **LEA Comm No:** 68V7089 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 08/13/97 **End Date** 08/13/97	**Bor.** SK-SB-2

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1640486	88		Top 4": Process stone, fine and coarse GRAVEL, with brown, fine Sand and Silt, trace fibric organic matter; Bottom 38": Reddish brown, fine to coarse SAND, some fine and coarse Gravel, trace Silt, trace Cobbles, dry to slightly moist, loose to moderately dense, Fill	0
	1640487				0
4	1640488	83		Top 18": Light grey to light yellowish brown, fine to very fine SAND, little Silt, moist, loose; Bottom 22": Light yellowish brown, fine SAND grading to reddish grey, fine to medium SAND, trace coarse Sand, wet, loose	0
	1640489				0.2
8	1640490	62		Top 10": Reddish grey, fine to coarse SAND, trace fine Gravel, wet, loose; Bottom 20": Olive grey, fine to medium SAND, trace Silt, trace coarse Sand, wet, loose	0.4
	1640491				0.4
12	1640492	88		Top 32": Dark grey, fine(+) to coarse SAND, wet, loose; Bottom 10": Grey, CLAY, trace brown, very fine to fine Sand and Silt, wet, moderately dense, varved	1.0
	1640493				2.0
16				Bottom of Boring at 16'	
20					
24					

Comments:

Printed On: 2/9/1998

Boring No: SK-SB-235

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GEOLOGIC BORING LOG

Project: Linde Area Add. Inv. UST **LEA Comm No:** 68V7089 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 08/13/97 **End Date** 08/13/97	**Boring ID** SK-SB-236

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1640494	83		Cored through 6" concrete; Top 3": Concrete debris and pieces; Middle 35": Reddish brown, fine to coarse SAND, some fine and coarse Gravel, trace Silt, dry to slightly moist, loose to moderately dense, Fill; Bottom 2": Grey, SILT, with fine to very fine Sand, trace fibric organic matter, moist, moderately dense	0
	1640495				0
4	1640496	75		Top 16": Light grey to light yellowish brown, fine to very fine SAND, little Silt, moist, loose; Next 4": Orange-stained, fine to medium SAND, moist, loose; Next 2": Same as top 16", brown; Bottom 14": Reddish grey, fine to medium SAND, trace coarse Sand, wet, loose	0
	1640497				0.9
8	1640498	46		Top 19": Reddish grey to brownish grey, fine to medium SAND, trace coarse Sand, wet, loose; Bottom 3": Olive grey, fine SAND, trace Silt, trace medium Sand, wet, loose	0.4
	1640499				0.8
12	1640500	42		Top 12": Dark grey, fine(+) to coarse SAND, trace Silt, trace fine Gravel, wet, loose; Middle 2": Dark grey, fine to medium SAND, wet, loose; Bottom 6": Grey, CLAY, trace brown, very fine to fine Sand and Silt, wet, moderately dense, varved	0.6
	1640501				1.0
16				Bottom of Boring at 16'	
20					
24					

Comments:

Printed On: 2/9/1998

Boring No. -SB-236

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GEOLOGIC BORING LOG

Project: Linde Area Add. Inv. UST **LEA Comm No:** 68V7089 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 08/13/97 **End Date** 08/13/97	**Boring ID** **SK-SB-237**
Drilling Contractor: LEA **Drilling Method:** Geoprobe **Sampling Method:** Macro Core **Groundwater Observations:** **Depth:** At: Hours **Depth:** At: Hours	**Logged By:** J. Trzaski **Drilling Foreman:** D. Brisson **Drill Rig:** Geoprobe 5400 **Surface Elevation:** **Northing:** **Easting:**	

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1640502	79		Top 6": Process stone, fine and coarse GRAVEL, with brown, fine Sand and Silt, trace organic matter; Bottom 32": Reddish brown, fine to coarse SAND, little fine and coarse Gravel, trace Silt, dry to slightly moist, loose to moderately dense, Fill	0
	1640503				0
4	1640504	75		Top 6": Greyish brown, fine to very fine SAND, little Silt, moist, loose; Next 5": Light yellowish brown, fine SAND, trace medium Sand, moist, loose; Next 8": Same as top 6"; Bottom 17": Reddish grey, fine to medium SAND, trace coarse Sand, wet, loose	0
	1640505				0.4
8	1640506	58		Top 23": Reddish grey, fine to medium SAND, trace coarse Sand, trace silt, with 5" layer fine Sand, trace medium Sand at 7", wet, loose; Bottom 5": Olive brown, fine to very fine SAND, trace Silt, wet, loose	0.2
	1640507				1.0
12	1640508	100		Top 32": Dark grey, fine(+) to coarse SAND, trace fine Gravel, wet, loose; Bottom 16": Grey, CLAY, trace very fine to fine Sand and Silt, wet, moderately dense, varved	1.0
	1640509				5.0
16				Bottom of Boring at 16'	
20					
24					

Comments:

Printed On: 2/9/1998

Boring No: SK-SB-237

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GEOLOGIC BORING LOG

Project: Linde Area Add. Inv. UST **LEA Comm No:** 68V7089 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 08/13/97 **End Date** 08/13/97	**Boring ID** SK-SB-238

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours ▽
Depth: At: Hours ▽

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1640510	75		Top 4": Process stone, fine and coarse GRAVEL, with brown, fine Sand and Silt, trace organic matter; Bottom 32": Reddish brown, fine to coarse SAND, little fine and coarse Gravel, trace Silt, dry to slightly moist, moderately dense, Fill	0
	1640511				0
4	1640512	62		Top 6": Greyish brown, fine to very fine SAND, little Silt, moist, loose; Middle 10": Light yellowish brown, fine SAND, trace Silt; Bottom 14": Reddish grey, fine to medium SAND, trace Silt, wet, loose	0
	1640513				0.8
8	1640514	71		Top 24": Same as above last 14", trace coarse Sand; Bottom 10": Olive grey, fine(+) to very fine SAND, trace Silt, wet, loose	0.2
	1640515				1.3
12	1640516	79		Top 30": Dark grey, fine(+) to medium SAND, trace coarse Sand, trace Silt, wet, loose; Bottom 8": Grey, CLAY, trace brown, very fine to fine Sand and Silt, wet, moderately dense, varved	1.5
	1640517				7.2
16				Bottom of Boring at 16'	
20					
24					

Comments:

Printed On: 2/9/1998

Boring No -SB-238

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GEOLOGIC BORING LOG

Project: Linde Area Add. Inv. UST **LEA Comm No:** 68V7089 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 08/13/97 **End Date** 08/13/97	**Boring ID** SK-SB-239

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1640518	58		Top 6": Process stone, fine and coarse GRAVEL and brown, fine to coarse SAND, some Silt, trace organic matter; Bottom 22": Reddish brown, fine to coarse SAND, some fine and coarse Gravel, trace Silt, slightly moist, loose, Fill	0
	1640519				0
4	1640520	50		Top 4": Brown, fine to very fine SAND, little Silt, moist, loose; Next 8": Yellowish brown, fine Sand, trace medium Sand, trace Silt, moist to wet, loose; Next 2": Same as top 4"; Bottom 10": Reddish grey, fine to medium SAND, wet, loose	0
	1640521				0.3
8	1640522	83		Top 4": Reddish grey, SILT, wet, loose; Middle 28": Reddish grey, fine(+) to medium SAND, trace coarse Sand, trace silt, wet, loose; Bottom 8": Olive grey, fine(+) to very fine Sand, trace silt, wet, loose	0.5
	1640523				0.6
12	1640524	79		Top 24": Dark grey, fine to coarse SAND, little fine Gravel, trace Silt, wet, loose; Bottom 14": Grey, CLAY, trace brown very fine to fine Sand and Silt, wet, moderately dense, varved	0.5
	1640525				1.6
16				Bottom of Boring at 16'	
20					
24					

Comments:

Printed On: 2/9/1998

Boring No: SK-SB-239

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GEOLOGIC BORING LOG

Project: VPSA Outside Drum Storage and Quonset H **LEA Comm No:** 68V7092 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 08/27/97 **End Date** 08/27/97	**Boring ID** **SK-SB-240**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1641444	79		Top 12": Greyish brown, fine SAND and SILT with process stone, fine and coarse Gravel, slightly moist, loose; Next 6": Dark brown, SILT with fine Sand, trace medium Sand, slightly moist, loose; Next 10": Strong brown, fine SAND, little Silt, trace medium Sand, slightly moist, loose; Bottom 10": Yellowish brown, fine(+) to medium SAND, slightly moist, loose	2.4
	1641445 1641446				0.0
4	1641447	75		Top 12": Yellowish brown, fine to medium SAND, moist, loose; Next 8": Grey, SILT with fine to very fine Sand, moist, loose; Next 10": Reddish brown, fine SAND, little Silt, wet, loose; Bottom 6": Yellowish brown, fine to medium SAND, wet, loose, slight iron staining	0.4
	1641448				0.2
8	1641449	71		Top 12": Brown, fine(+) to medium SAND, wet, loose; Middle 10": Greyish brown, very fine to fine SAND, wet, loose; Bottom 12": Yellowish brown, fine to medium SAND, trace coarse Sand, trace Silt, wet, loose	0.0
	1641450				0.0
12	1641451	92		Top 4": Light olive brown, fine to medium SAND, wet, loose; Next 8": Light olive brown, fine to very fine SAND, wet, loose; Next 8": Yellowish brown, medium to fine SAND, wet, loose; Bottom 24": Grey, CLAY, little brown Silt and fine to very fine Sand, wet, moderately dense, varved	1.7
	1641452				1.8
16				Bottom of Boring at 16'	
20					
24					

Comments:

Printed On: 2/13/1998

Boring No. SK-SB-240

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GEOLOGIC BORING LOG

Project: VPSA Outside Drum Storage and Quonset H **LEA Comm No:** 68V7092 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 08/27/97 **End Date** 08/27/97	**Boring ID** **SK-SB-241**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1641453	79		Punched through 3" asphalt; Top 12": Process stone, fine GRAVEL, with brown, Silt and fine Sand, trace coarse Gravel, slightly moist, loose; Middle 12": Strong brown, SILT with fine Sand, trace medium Sand, slightly moist, loose; black fibric organic matter at bottom; Bottom 14": Yellowish brown, fine(+) to medium SAND, slightly moist, loose	1.4
	1641454				0.0
4	1641455	67		Top 14": Brown, fine SAND, trace Silt grading to fine to very fine Sand, moist to wet, loose; Middle 5": Grey, SILT, some fine to very fine Sand, moist, moderately dense; Bottom 13": Grey to greyish brown, fine to very fine SAND, trace Silt grading to fine Sand, wet, loose	0.0
	1641456				0.0
8	1641457	79		Top 8": Brown, fine(+) to medium SAND, trace Silt, wet, loose; Next 7": Brown, fine to very fine SAND, wet, loose; Next 14": Same as top 8"; Bottom 9": Light olive brown, fine to very fine SAND, wet, loose	0.4
	1641458				1.6
12	1641459	79		Top 24": Yellowish brown, fine(+) to coarse SAND, trace fine Gravel, wet, loose, slight coarsening downward; Bottom 14": Grey, CLAY, little brown, Silt and fine to very fine Sand, wet, dense, varved	1.4
	1641460				0.2
16				Bottom of Boring at 16'	
20					
24					

Comments:

Printed On: 2/13/1998

Boring No: SK-SB-241

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GEOLOGIC BORING LOG

Project: VPSA Outside Drum Storage and Quonset H **LEA Comm No:** 68V7092 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 08/27/97 **End Date** 08/27/97	**Boring ID** **SK-SB-242**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1641461	88		Top 10": Brown, SILT and fine SAND with process stone, fine Gravel, slightly moist, loose; Middle 12": Strong brown, SILT wth fine Sand, slightly moist, loose; Bottom 20": Yellowish brown, fine(+) to medium SAND, trace Silt, slightly moist to moist, loose, punched through 3" asphalt	7.6
	1641462				9.2
4	1641463	71		Top 10": Brown, fine SAND, moist, loose; Middle 6": Grey, SILT, some fine to very fine SAND wet, moderately dense; Bo,tom 18": Grey to reddish brown, fine to very fine SAND, grading to fine SAND, wet, loose	9.8
	1641464				7.9
8	1641465	67		Dark yellowish brown, fine(+) to medium SAND, trace Silt, wet, loose, brown, fine to very fine SAND at 20-26"	9.1
	1641466				10.7
12	1641467	100		Top 26": Yellowish brown, fine(+) to coarse SAND, trace fine Gravel, wet, loose, slight coarsening downward; Bottom 22": Grey, CLAY, trace brown, Silt and fine to very fine Sand, wet, dense, varved	10.4
	1641468				6.0
16				Bottom of Boring at 16'	
20					
24					

Comments:

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Printed On: 2/13/1998

Boring No. K-SB-242

GEOLOGIC BORING LOG

Project: VPSA Outside Drum Storage and Quonset H **LEA Comm No:** 68V7092 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 08/27/97 **End Date** 08/27/97	**Boring ID** **SK-SB-243**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1641469	62		Cored thru 5" concrete; Top 4": Dusky red, fine(+) to coarse SAND, trace Silt, trace fine Gravel, dry, loose; Middle 14": Brown to strong brown, fine SAND with Silt, trace medium Sand, slightly moist, loose; Bottom 12": Yellowish brown, fine to medium SAND, slightly moist, loose	4.7
	1641470				8.7
4	1641471	54		Top 6": Brown, fine(+) to very fine SAND, moist, loose; Middle 8": Grey, SILT with fine to very fine Sand, wet, moderately dense; Bottom 12": Same as top 6", wet	11.1
	1641472				10.3
8	1641473	67		Top 14": Brown, fine(+) to medium SAND, trace(-) coarse Sand, wet, loose; Middle 13": Brown, fine to very fine SAND, wet, loose; Bottom 5": Same as top 14"	10.5
	1641474				10.5
12	1641475	83		Top 10": Light olive brown, fine to very fine SAND, wet, loose; Middle 16": Yellowish brown, fine to coarse SAND, trace fine Gravel, slight coarsening down, wet, loose; Bottom 14": Grey, CLAY, trace brown, Silt and fine to very fine Sand, wet, dense, varved	9.6
	1641476				2.6
16				Bottom of Boring at 16'	
20					
24					

Comments:

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GEOLOGIC BORING LOG

Project: VPSA Outside Drum Storage and Quonset **LEA Comm No:** 68V7092 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 08/29/97 **End Date** 08/29/97	**Boring ID** **SK-SB-244**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1641486	88		Punched through 3" asphalt; Top 2": Black bituminous asphalt; Middle 30": Dark yellowish brown to brown fine SAND, little Silt, trace fibric organic matter (top 12"), slightly moist, loose; Bottom 10": Light yellowish brown, fine to medium SAND, slightly moist to moist, loose	8.7
	1641487				4.8
4	1641488	75		Top 22": Brown, fine(+) to very fine SAND, trace Silt, trace medium Sand, moist to wet, loose; Bottom 14": Brown, fine(+) to medium SAND, wet, loose, slight iron staining	15.5
	1641489				15.1
8	1641490	54		Brown, fine SAND, trace medium Sand, trace Silt, wet, loose	11.0
	1641491				9.3
12	1641492 1641493	67		Top 20": Light olive brown, fine(+) to medium SAND grading to fine to coarse Sand (bottom 5"), wet, loose; Bottom 12": Grey, CLAY, trace brown, fine to very fine Sand and Silt, wet, dense, varved	38.9
	1641494				10.4
16				Bottom of Boring at 16'	
20					
24					

Comments:

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GEOLOGIC BORING LOG

Project: VPSA Outside Drum Storage and Quonset H **LEA Comm No:** 68V7092 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 08/29/97 **End Date** 08/29/97	**Boring ID** **SK-SB-245**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1641495	88		Top 2": Black asphalt; Next 5": Dusky red, coarse to fine SAND, little fine Gravel, trace coarse Gravel, slightly moist, loose; Next 12": Dark yellowish brown, fine to very fine SAND with Silt, moist, loose; Next 6": Dark brown to black, SILT, little fine Sand, little fibric and hemic organic matter, moist, loose; Bottom 17": Greyish brown, fine SAND, trace Silt, trace medium Sand, moist, loose	8.9
	1641496				10.5
4	1641497	54		Top 12": Grey, fine(+) to very fine SAND, trace Silt, wet, loose; Bottom 14": Grey to greyish brown, fine to medium SAND, wet, loose	12.3
	1641498				12.7
8	1641499	67		Top 10": Brown, fine(+) to very fine SAND, wet, loose; Next 10": Yellowish brown, fine to coarse SAND, wet, loose; Next 8": Same as top 10"; Bottom 4": Light olive brown, fine to coarse SAND, wet, loose	14.6
	1641500				15.9
12	1641501	100		Top 8": Light olive brown, fine to very fine SAND, wet, loose; Middle 14": Light olive brown to yellowish brown, medium to fine SAND, wet, loose; Bottom 26": Grey, CLAY, trace brown, fine to very fine Sand and Silt, wet, dense, varved	23.3
	1641502				10.5
16				Bottom of Boring at 16'	
20					
24					

Comments:

LEA
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Printed On: 2/13/1998

Boring No: SK-SB-245

GEOLOGIC BORING LOG

Project: VPSA Outside Drum Storage and Quonset H **LEA Comm No:** 68V7092 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 09/02/97 **End Date** 09/02/97	**Boring ID** **SK-SB-246**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: J. Sweeton
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1641505	75		Punched through 2" asphalt; top 1": Grey, fine GRAVEL with asphalt pieces; Middle 14": Reddish brown, fine(+) to coarse SAND, little fine Gravel, trace Silt, slightly moist, loose; Bottom 21": Dark brown to greyish brown, fine SAND with Silt, trace fibric and hemic organic matter, moist, loose, slight petroleum(?) odor	15.4
	1641506				9.3
4	1641507 1641508	88		Top 12": Greyish brown, fine to very fine SAND, little Silt, moist, loose; Middle 5": Grey, SILT, little fine to very fine Sand, wet, moderately dense; Bottom 25": Greyish brown to reddish grey, fine SAND grading to fine to medium SAND, moist to wet, loose	7.1
	1641509				6.9
8	1641510	75		Top 30": Greyish brown, fine to medium SAND, trace(-) coarse Sand, trace Silt, wet, loose; Bottom 6": Light olive brown, fine to coarse SAND, wet, loose	10.2
	1641511				67.2
12	1641512	58		Top 16": Yellowish brown, fine to coarse SAND, wet, loose; Bottom 12": Grey, CLAY, trace brown, fine to very fine Sand and Silt, wet, dense, varved	7.0
	1641513				6.4
16				Bottom of Boring at 16'	
20					
24					

Comments:

LEA
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GEOLOGIC BORING LOG

Project: VPSA Outside Drum Storage and Quonset **LEA Comm No:** 68V7092 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 09/02/97 **End Date** 09/02/97	**Boring ID** **SK-SB-247**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: J. Sweeton
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1641514	81		Punched through 2" asphalt; Top 3": Grey process stone, fine and coarse Gravel, some fine to coarse Sand, trace asphalt pieces; Bottom 31": Dark yellowish brown, fine to very fine SAND, little Silt, fibric and hemic organic matter, moist to wet, loose	3.6
	1641515				4.4
4	1641516	100		Top 10": Same as above last 31", trace fibric and hemic organic matter; Next 5": Grey, SILT, some fine to very fine Sand, wet, moderately dense; Next 8": Greyish brown, fine to very fine SAND, trace silt, wet, loose; Bottom 25": Reddish grey, fine(+) to medium SAND, wet, loose	9.4
	1641517				6.1
8	1641518	79		Greyish brown to light olive brown, fine to coarse SAND, trace fine Gravel, wet, loose	9.3
	1641519				8.0
12	1641520	79		Top 12": Dark yellowish brown, fine(+) to very fine SAND, wet, loose; Middle 5": Yellowish brown, medium to coarse SAND, wet, loose; Bottom 21": Grey, CLAY, trace brown, fine to very fine Sand and Silt, wet, dense, varved	10.1
	1641521				5.2
16				Bottom of Boring 16'	
20					
24					

Comments:

Printed On: 2/13/1998

Boring No: SK-SB-247

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GEOLOGIC BORING LOG

Project: VPSA Outside Drum Storage and Quonset H **LEA Comm No:** 68V7092 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 09/02/97 **End Date** 09/02/97	**Boring ID** **SK-SB-248**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: J. Sweeton
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1641522	79		Punched through 2" asphalt; Top 5": Grey, Process stone, fine and coarse Gravel with olive grey, fine to coarse Sand, dry, loose; Bottom 33": Dark yellowish brown, fine to y	5.1
	1641523			fine SAND with Silt, trace fibric organic matter throughout, trace hemic organic matter; Bottom 10": Slightly moist to moist, loose to moderately dense	3.3
4	1641524	100		Top 6": Same as above last 10"; Next 10": Olive grey, fine to very fine SAND, little Silt, wet, loose; Next 4": Grey, SILT with fine to very fine Sand, wet, dense; Bottom 28":	4.0
	1641525			Reddish grey, fine SAND grading to fine to medium SAND, moist to wet, loose	3.5
8	1641526	71		Yellowish brown, fine to medium SAND, trace coarse Sand, wet, loose	3.7
	1641527				4.4
12	1641528	75		Top 14": Yellowish brown, fine(+) to coarse SAND, wet, loose; Bottom 22": Grey, CLAY, trace brown, fine to very fine Sand and Silt, wet, dense, varved	4.4
	1641529				2.8
16				Bottom of Boring at 16'	
20					
24					

Comments:

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Printed On: 2/13/1998

Boring No. SK-SB-248

GEOLOGIC BORING LOG

Project: VPSA Outside Drum Storage and Quonset Hut **LEA Comm No:** 68V7092 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 09/02/97 **End Date** 09/02/97	**Boring ID** **SK-SB-249**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: J. Sweeton
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1641530	83		Punched through 3" asphalt; top 4": Grey, Process stone, fine Gravel with olive brown, fine to medium Sand, trace asphalt pieces; Next 22": Dark yellowish brown, fine to very fine SAND with Silt, trace fibric organic matter, slightly moist to wet, loose; Next 5": Dark brown to black, SILT, some hemic organic matter, trace fibric organic matter, wet, loose; Next 5": Olive grey, fine to very	4.1
	1641531				4.0
4	1641532	92		fine SAND and SILT, wet, moderately dense; Bottom 4": Light olive brown, fine SAND, wet, loose	5.1
	1641533			Top 10": Dark brown to black, fine to very fine SAND, with Silt, trace hemic organic matter, wet, loose, 1" layer asphalt at bottom; Next 5": Grey, SILT, little fine to very fine Sand, wet, dense; Bottom 29": Greyish brown, fine SAND grading to reddish grey, fine to medium SAND, wet,	2.2
8	1641534	75		loose	4.6
	1641535			Brown, fine(+) to medium SAND, wet, loose, trace(-) coarse Sand	4.8
12	1641536	83		Top 12": As Above, grading to fine to coarse SAND (bottom 3"); Bottom 28": Grey, CLAY, trace brown, fine to very fine Sand and Silt, wet, dense, varved	2.5
	1641537				2.3
16				Bottom of Boring at 16'	
20					
24					

Comments:

Printed On: 2/13/1998

Boring No: SK-SB-249

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GEOLOGIC BORING LOG

Project: VPSA Outside Drum Storage and Quonset H **LEA Comm No:** 68V7092 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 09/03/97 **End Date** 09/03/97	**Boring ID** **SK-SB-250**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours ▽
Depth: At: Hours ▽

Logged By: J. Trzaski
Drilling Foreman: J. Sweeton
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1641541	83		Cored through 4" concrete; Top 4": Concrete pieces and debris; Middle 20": Dark yellowish brown, fine to very fine SAND, some Silt, trace brick pieces, wood pieces at 12", slightly moist, loose; Bottom 16": Strong brown, fine SAND, little Silt grading to reddish grey, fine(+) to medium Sand, slightly moist to moist, loose	7.8
	1641542 1641543				11.3
4	1641544	92		Top 10": Reddish grey, fine to very fine SAND, moist, loose; Next 5": Grey, SILT, some fine to very fine Sand, moist, moderately dense; Next 12": Reddish grey, fine to very fine SAND grading to fine SAND, wet, loose; Bottom 17": Yellowish brown, fine to medium SAND, wet, loose	9.8
	1641545				9.2
8	1641546	75		Top 12": Brown, fine to very fine SAND, wet, loose; Bottom 24": Yellowish brown, fine to medium SAND, trace coarse Sand, wet, loose, iron staining throughout	6.5
	1641547				7.0
12	1641548	92		Top 10": Yellowish brown, fine to very fine SAND, wet, loose; Middle 8": Yellowish brown, fine(+) to coarse SAND, trace fine Gravel (at 3"), wet, loose; Bottom 26": Grey, CLAY, trace brown, fine to very fine Sand and Silt, wet, dense, varved	6.1
	1641549				3.8
16				Bottom of Boring at 16'	
20					
24					

Comments:

Printed On: 2/13/1998

Boring No. SK-SB-250

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GEOLOGIC BORING LOG

Project: VPSA Outside Drum Storage and Quonset H **LEA Comm No:** 68V7092 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 09/03/97 **End Date** 09/03/97	**Boring ID** **SK-SB-251**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours ▽
Depth: At: Hours ▽

Logged By: J. Trzaski
Drilling Foreman: J. Sweeton
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1641550	83		Top 2": Organic debris and roots; Middle 34": Dark yellowish brown, fine to very fine SAND with Silt, little fibric organic matter, dry to slightly moist, loose, topsoil; Bottom 4": Pale brown, fine SAND, slightly moist, trace fibric organic matter, loose	3.0
	1641551				1.8
4	1641552	92		Top 10": Light yellowish brown to brown, fine SAND grading to fine to very fine SAND, moist, loose; Next 5": Grey, SILT with fine to very fine Sand, wet, dense; Next 5": Brown, fine to very fine SAND, trace Silt, wet, loose; Bottom 24": Brown, fine(+) to medium SAND, wet, loose	5.0
	1641553				5.3
8	1641554	75		Brown to yellowish brown, fine to medium SAND, trace coarse Sand, trace Silt, wet, loose, 5" layer medium to coarse Sand, trace fine Gravel from 22-28"	5.2
	1641555				8.8
12	1641556	67		Top 18": Yellowish brown, fine(+) to coarse SAND (top 6") grading to fine SAND, wet, loose; Bottom 14": Grey, CLAY, trace brown, fine to very fine Sand and Silt, wet, dense, varved	5.6
	1641557				4.1
16				Bottom of Boring at 16'	
20					
24					

Comments:

Printed On: 2/13/1998

Boring No: SK-SB-251

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GEOLOGIC BORING LOG

Project: VPSA Outside Drum Storage and Quonset H **LEA Comm No:** 68V7092 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 09/03/97 **End Date** 09/03/97	**Boring ID** **SK-SB-252**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: J. Sweeton
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1641558	92		Top 22": Dark yellowish brown, fine to very fine SAND with Silt, little fibric organic matter, slightly moist to wet (from 14-22") loose; Next 10": Strong brown to brown, fine SAND, some Silt, dry, dense; Bottom 12": Pale brown to yellowish brown, fine(+) to medium SAND, slightly moist, loose	2.6
	1641559				0.8
4	1641560	88		Top 10": Yellowish brown, fine SAND grading to fine to very fine SAND, trace Silt, moist, loose; Next 5": Grey, SILT, some fine to very fine Sand, wet, dense; Next 12": Brown, fine SAND, moist, loose; Next 3": Reddish brown, very fine SAND, trace Silt, wet, loose; Bottom 12": Reddish grey, fine to medium SAND trace coarse Sand, wet, loose	1.7
	1641561				5.6
8	1641562	62		Yellowish brown (15") to olive grey (bottom 15"), fine to medium SAND, trace fine Gravel, wet, trace coarse Sand, loose	5.7
	1641563				19.1
12	1641564	67		Top 18": Yellowish brown, fine to coarse SAND, wet, loose; Bottom 14": Grey, CLAY, trace brown fine to very fine Sand and Silt, wet, dense, varved	8.3
	1641565				6.2
16				Bottom of Boring at 16'	
20					
24					

Comments:

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GEOLOGIC BORING LOG

Project: VPSA Outside Drum Storage and Quonset H **LEA Comm No:** 68V7092 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 09/08/97 **End Date** 09/08/97	**Boring ID** **SK-SB-253**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1641572	92		Top 32": Dark yellowish-brown to yellowish-brown, fine to very fine SAND, some Silt, trace fibric organic matter, slightly moist, loose, topsoil; Bottom 12": Pale brown, fine(+) to medium SAND, slightly moist, loose	0.0
	1641573	92			0.0
4	1641574	75		Top 8": Yellowish-brown, fine to very fine SAND, trace Silt, moist, loose; Next 5": Greyish-brown, SILT and fine to very fine SAND, moist, medium SAND, moist, medium dense; Bottom 23": Alternating layers of reddish-brown, very fine SAND and medium fine SAND, moist to wet, loose	0.0
	1641575	75			0.5
8	1641576	67		Yellowish-brown to olive-grey, fine to medium SAND, trace(+) coarse Sand, wet, loose, generally coarsening downward	2.0
	1641577 1641578	67			5.0
12	1641579	83		Top 30": Olive-grey to yellowish-brown, fine to medium SAND, trace(+) coarse Sand, wet, grading to fine(+) to mediumSand, loose; Bottom 10": Grey, CLAY, trace brown, fine to very fine Sand and Silt, wet, dense, varved	1.0
	1641580	83			1.5
16				Bottom of Boring 16'	
20					
24					

Comments:

Printed On: 2/13/1998

Boring No: SK-SB-253

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GEOLOGIC BORING LOG

Project: VPSA Outside Drum Storage and Quonset H **LEA Comm No:** 68V7092 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 09/10/97 **End Date** 09/10/97	**Boring ID** **SK-SB-254**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1641581	100		Top 24": Dark yellowish-brown to yellowish-brown, fine to very fine SAND, little Silt, trace fibric organic matter, slightly moist to wet (bottom 4"), loose; Next 18": Dark-brown and black-stained SILT and fine to very fine SAND, little fibric and hemic organic matter, wet, moderately dense; Bottom 6": Light yellowish-brown, fine SAND, trace medium Sand, moist, loose	1.0
	1641582	100			0.0
4	1641583	75		Top 5": Yellowish-brown, fine to very fine SAND, wet, loose, Next 6": Grey SILT and fine to very fine SAND, wet, dense; Next 4": Same as top 5"; Bottom 21": Light yellowish-brown to reddish-grey, fine to medium SAND, wet, loose	0.0
	1641584	75			0.0
8	1641585	83		Top 16": Yellowish-brown, fine to medium SAND, wet, loose; Bottom 24": Olive-grey, fine(+) to coarse SAND, trace(-) fine Gravel, wet, loose	5.0
	1641586	83			155.0
12	1641587	58		Top 16": Yellowish-brown, fine to coarse SAND, wet, loose; Bottom 12": Olive-grey, CLAY, trace brown, fine to very fine Sand and Silt, wet, dense, varved	3.0
	1641588	58			2.0
16				Bottom of Boring 16'	
20					
24					

Comments:

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GEOLOGIC BORING LOG

Project: VPSA Outside Drum Storage and Quonset [illegible] **LEA Comm No:** 68V7092 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 09/08/97 **End Date** 09/08/97	**Boring ID** **SK-SB-255**
Drilling Contractor: LEA **Drilling Method:** Geoprobe **Sampling Method:** Macro Core **Groundwater Observations:** **Depth:** At: Ho **Depth:** At: Hours	**Logged By:** J. Trzaski **Drilling Foreman:** D. Brisson **Drill Rig:** Geoprobe 5400 **Surface Elevation:** **Northing:** **Easting:**	

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1641589	100		Top 36": Dark yellowish and black-stained, SILT and fine to very fine SAND, fibric organic matter at 0-8" and 28-36", hemic and sapic organic matter at 28-36", slightly moist to moist, loose to dense; Bottom 12": Light yellowish-brown, fine SAND, trace medium Sand, moist, loose	0.0
	1641590	100			6.0
4	1641591	75		Top 3": Reddish-brown, fine(+) to very fine SAND, moist, loose; Next 6": Grey, SILT with fine to very fine SAND, wet, dense, orange Mottles; Next 27": Yellowish-brown to reddish- grey, fine SAND grading to fine to medium Sand, moist to wet, loose	0.0
	1641592	75			2.0
8	1641593	58		Greyish-brown, fine to medium SAND, trace corse Sand, trace Silt, wet, loose	6.0
	1641594	58			35.0
12	1641595	88		Top 26": Olive-grey to yellowish-brown, fine to medium SAND, trace(+) coarse Sand, wet, loose; Bottom 16": Olive-grey, CLAY, trace brown, fine to medium Sand and Silt, wet, dense, varved	250.0
	1641596	88			1.0
16				Bottom of Boring 16'	
20					
24					

Comments:

Printed On: 2/13/1998

Boring No: SK-SB-255

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GEOLOGIC BORING LOG

Project: VPSA Outside Drum Storage and Quonset H **LEA Comm No:** 68V7092 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 09/08/97 **End Date** 09/08/97	**Boring ID** **SK-SB-256**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours ▽
Depth: At: Hours ▽

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1641597	79		Top 14": Dark yellowish-brown, fine to very fine SAND with Silt, trace fibric organic matter, slightly moist, loose; Next 10": Brown, fine(+) to medium SAND moist to wet, loose, 1" Asphalt piece at 3"; Next 6": Dark brown and black-stained, SILT, some fine to very fine SAND, fibric and supric organic matter, wet, moderately denst; Bottom 8": Olive-grey, fine to very fine SAND, trace Silt, wet, loose	0.0
	1641598	79			100
4	1641599	50		Top 2": Grey, SILT and fine to very fine SAND, wet, modertely dense; Next 8": Brown, fine(+) to very fine SAND, moist, loose; Bottom 14": Yellowish-brown to reddish-grey, fine to medium SAND, wet, loose	0.0
	1641600	50			0.0
8	1641601	50		Brown, fine(+) to medium SAND, trace coarse Sand, generally fining downward, wet, loose	2.0
	1641602	50			2.0
12	1641603	60		Top 6": Yellowish-brown, fine to coarse SAND, wet, loose; Next 5": Brown, fine SAND, trace medium Sand, wet, loose; Next6": Same as top 6"; Bottom 12": Grey CLAY, trace brown, very fine Sand and Silt, wet, moderately dense, varved	0.0
	1641604	60			0.0
16				Bottom of Boring 16'	
20					
24					

Comments:

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Printed On: 2/13/1998

Boring N K-SB-256

GEOLOGIC BORING LOG

Project: VPSA Outside Drum Storage and Quonset H **LEA Comm No:** 68V7092 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 09/09/97 **End Date** 09/09/97	**Boring ID** SK-SB-257

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1641609	83		Brown to yellowish-brown, fine SAND, little Silt, trace coarse Gravel, trace medium Sand, fibric organic matter @ top 10", dry to moist, loose; 2": Layer dark brown, SILT with fine to very fine Sand, fibric and sapric organic matter, wet, loose at 28-30"	0
	1641610	83			0
4	1641611	58		Yellowish-brown to pale brown, fine to medium SAND, wet, loose, trace Silt	0.5
	1641612	58			1.0
8	1641613	62		Brown to light olive-brown, fine to medium SAND, trace coarse Sand, wet, loose	3.5
	1641614	62			2.0
	1641615	62			
12	1641616	58		Top 16": Yellowish-brown, fine(+) to coarse SAND, wet, loose; Bottom 12": Grey, CLAY, trace brown, fine to very fine Sand and Silt, wet, dense, varved	0.5
	1641617	58			0.5
16				Bottom of Boring 16'	
20					
24					

Comments:

Printed On: 2/13/1998

Boring No: SK-SB-257

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GEOLOGIC BORING LOG

Project: VPSA Outside Drum Storage and Quonset H	**Start Date** 09/09/97	**Boring ID**
LEA Comm No: 68V7092	**End Date** 09/09/97	**SK-SB-258**
Client: Pratt & Whitney		
Location: East Hartford, CT		

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours ▽
Depth: At: Hours ▽

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1641618	100		Top 14": Dark yellowish-brown, fine SAND, some Silt, fibric organic matter, slightly moist, loose; Next 30": Dark brown, SILT with fine to very fine Sand, fibric organic matter throughout, sapric organic matter at bottom 12", slightly moist to wet, loose; Bottom 4": Grey, fine to very fine SAND and SILT, moist, orange Mottles, dense	0
	1641619	100			50.0
4	1641620	75		Top 5": Same as last 4"; Bottom 31": Greyish-brown, fine to very fine SAND, trace Silt, grading to reddish-grey, fine to medium SAND, moist to wet, loose	1.0
	1641621	75			1.5
8	1641622	83		Top 30": Brown, fine(+) to medium SAND, trace(-) coarse Sand, wet, loose; Bottom 10": Yellowish-brown, fine to coarse SAND, wet, loose	1.0
	1641623	83			0
12	1641623	83		Top 20": Yellowish-brown, fine(+) to medium SAND, wet, loose; Middle 6": Yellowish-brown, medium to fine SAND, trace coarse Sand, wet, loose; Bottom 14": Grey, CLAY, trace brown, fine to very fine SAND, Silt, wet, dense, varved	0
	1641624	83			0
16				Bottom of Boring 16'	
20					
24					

Comments:

LEA
LOUREIRO ENGINEERING ASSOCIATES, PC
100 Northwest Drive, Plainville, Connecticut, 06062, Phone(203)747-6181 FAX (203)747-8822

GEOLOGIC BORING LOG

Project: VPSA Outside Drum Storage and Quonset H **LEA Comm No:** 68V7092 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 09/09/97 **End Date** 09/09/97	**Boring ID** **SK-SB-259**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours ▽
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1641626	83		Top 30": Yellowish-brown, fine SAND, little Silt, trace medium Sand, fibric organic matter at top 8", slightly moist to moist, loose; Next 2": Dark brown, SILT with fine to very fine Sand, fibric and sapric organic matter, moist, loose; Bottom 4": Grey, SILT and fine to very fine SAND, moist, dense, orange Mottles	1.5
	1641627	83			2.4
4	1641628	71		Brown, fine(+) to very fine SAND, trace Silt, grading to yellowish-brown, fine to medium SAND, moist to wet, loose, wet at 10"	1.0
	1641629	71			1.0
8	1641630	83		Yellowish-brown, fine to medium SAND, trace(+) coarse Sand, wet, loose	1.0
	1641631	83			1.0
12	1641632	75		Top 14": Yellowish-brown, fine to coarse SAND, wet, loose; Bottom 22": Olive-grey, CLAY, trace fine to very fine SAND and SILT, wet, moderately dense, varved	0.5
	1641633	75			0.5
16				Bottom of Boring 16'	
20					
24					

Comments:

Printed On: 2/13/1998

Boring No: SK-SB-259

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GEOLOGIC BORING LOG

Project: VPSA Outside Drum Storage and Quonset H **LEA Comm No:** 68V7092 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 09/09/97 **End Date** 09/09/97	**Boring ID** **SK-SB-260**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1641634	92		Top 2": Black bituminous Asphalt; Next 6": Red, fine to coarse SAND, trace fine Gravel, trace Silt, dry, loose; Next 28": Dark brown, SILT and fine to very fine SAND, fibric and sapric organic matter, moist to wet, loose, wet at 12"; Next 4": Grey, SILT and fine to very fine SAND, moist, dense; Bottom 4": Olive, fine to very fine SAND, moist, loose	900
	1641635	92			200
4	1641636	83		Top 14": Pale-brown, fine to very fine SAND, little Silt, moist, loose; Middle 10": Grey, SILT, wet, loose; Bottom 16" : Brown, fine SAND, grading to reddish-grey, fine to medium Sand, wet, loose	60.0
	1641637	83			20.0
8	1641638	79		Top 34": Yellowish-brown, fine to medium SAND, trace(+) coarse Sand, wet, loose; Bottom 4": Yellowish-brown, fine SAND, wet, loose	1.5
	1641639	79			1.0
12	1641640	88		Top 22": Brown, fine to very fine SAND, wet, loose; Next 20" : Grey, CLAY, trace brown, fine to very fine Sand and Silt, wet, dense, varved	1.0
	1641641	88			1.0
16				Bottom of Boring 16'	
20					
24					

Comments:

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Printed On: 2/13/1998

Boring No. SK-SB-260

GEOLOGIC BORING LOG

Project: VPSA Outside Drum Storage and Quonset H
LEA Comm No: 68V7092
Client: Pratt & Whitney
Location: East Hartford, CT

Start Date 09/09/97
End Date 09/09/97

Boring ID SK-SB-261

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1641642	83		Top 6": Reddish-brown, fine to coarse SAND, little fine Gravel, trace Silt, dry, loose; Next 6": Yellowish-brown, fine SAND, little Silt, trce medium Sand, wet, loose; Next 26": Dark brown, SILT with fine to very fine Sand, fibric and sapric organic matter, wet, loose; Bottom 2": Grey, SILT and fine to very fine SAND, moist, dense	30
	1641643	83			>1000
4	1641644	88		Top 12": Grey, SILT, some fine to very fine Sand, loose to dense, wet; Next 20": Brown, fine(+) to very fine SAND, moist to wet, loose; Bottom 10": Brown, fine to medium SAND, wet, loose, trace coarse Sand	100.0
	1641645	88			5.0
8	1641646	71		Brown to yellowish-brown, fine to medium SAND, little(-) coarse Sand, wet, loose	1.0
	1641647	71			1.0
12	1641648	71		Top 6": Yellowish-brown, fine to coarse SAND, wet, trace fine Gravel, loose; Next 6": Same as top 6"; Bottom 2": Grey, CLAY, trace fine to very fine Sand, Silt, wet, moderately dense, varved	1.0
	1641649	71			1.5
16				Bottom of Boring 16'	
20					
24					

Comments:

Printed On: 2/13/1998

Boring No: SK-SB-261

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GEOLOGIC BORING LOG

Project: VPSA Outside Drum Storage and Quonset H **LEA Comm No:** 68V7092 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 09/10/97 **End Date** 09/10/97	**Boring ID** **SK-SB-262**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1641657	96		Top 26": Dark yellowish-brown, fine to very fine SAND, some Silt, trace medium Sand, fibric organic matter in top 6", slightly moist to wet (wet bottom 3"), loose; Next 8": Dark brown, SILT, fibric and sapric organic matter, wet, loose; Next 5": Olive-brown, fine SAND, some Silt; Bottom 7": Pale- brown, fine SAND, moist, loose	0
	1641658	96			0
4	1641659	75		Top 6": Same as last 7", trace SILT, wet; Next 8": Brown, fine to very fine SAND, trace Silt, wet, loose; Next 6": Grey, SILT, wet, loose; Bottom 16": Brown, fine(+) to medium SAND, wet, loose, septic odor	0
	1641660	75			0
8	1641661	83		Top 35": Brown to yellowish-brown, fine to medium SAND, trace(+) coarse Sand, trace Silt, wet, loose; Bottom 5": Yellowish-brown, fine to coarse SAND, trace fine Gravel, wet, loose	0
	1641662	83			0
12	1641663	83		Top 22": Same as last 5", little fine Gravel; Bottom 18": Olive-grey, CLAY, trace brown, fine to very fine SAND and SILT, wet, dense, varved	0
	1641664	83			0
16				Bottom ob Boring 16'	
20					
24					

Comments:

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GEOLOGIC BORING LOG

Project: VPSA Outside Drum Storage and Quonset H **LEA Comm No:** 68V7092 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 09/10/97 **End Date** 09/10/97	**Boring ID** **SK-SB-263**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1641666	88		Top 22": Yellowish-brown, SILT with fine to very fine Sand, trace fibric organic matter, dry, loose; Next1": Dark brown, SILT, fibric and sapric organic matter, moist, loose; Bottom 19": Light yellowish-brown, fine to very fine SAND and SILT, coarsening downward to yellowish-brown, fine SAND, slightly moist, loose	0
	1641667	88			1.0
4	1641668	83		Top 8": Grey, SILT, trace fine to very fine SAND, moist, dense; Next 22": Brown, fine to very fine SAND, trace Silt, trace medium Sand, moist to wet, loose, wet at 14"; Bottom 10": Brown, fine to medium SAND, wet, loose, occasional iron-staining	2.0
	1641669	83			1.0
8	1641670	71		Yellowish-brown, fine to medium SAND, little(-) coarse Sand, trace Silt, wet, loose, generally coarsening downward	0
	1641571	71			2.0
12	1641572	92		Top 10": Yellowish-brown, medium to fine SAND, little(-) coarse Sand, wet, loose; Middle 20": Brown, fine SAND, trace medium Sand, trace Silt, wet, loose; Bottom 14": Grey, CLAY, trace fine to very fine Sand and Silt, wet, dense, varved	0
	1641573	92			1.0
16				Bottom of Boring 16'	
20					
24					

Comments:

Printed On: 2/13/1998

Boring No: SK-SB-263

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GEOLOGIC BORING LOG

Project: VPSA Outside Drum Storage and Quonset H
LEA Comm No: 68V7092
Client: Pratt & Whitney
Location: East Hartford, CT

Start Date 09/10/97
End Date 09/10/97

Boring ID SK-SB-264

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1641674	83		Top 2": Organic debris; Next 10": Reddish-brown, fine to coarse SAND, little fine Gravel, trace coarse Gravel, trace Silt, dry, loose; Next 18": Yellowish-brown, SILT with fine to very fine Sand, trace fibric organic matter, slightly moist, medium dense to loose; Bottom 10": Light yellowish-brown, fine SAND, trace medium Sand, slightly moist, loose, slight petroleum(?) odor	30.0
	1641675	83			40.0
4	1641676	58		Top 12": Same as last 10", slightly moist to wet at bottom, loose, orange iron-staining at 10-12"; Next 5": Grey, SILT, little fine to very fine SAND, wet, dense, orange Mottles; Next 5": Grey, fine to very fine SAND, trace Silt, wet, loose; Bottom 6": Greyish-brown, fine to medium SAND, wet, loose	1.0
	1641677	58			0
8	1641678	79		Brown, fine(+) to medium SAND, trace coarse Sand, trace Silt, grading to medium to fine Sand, little coarse Sand, trace Silt, wet, loose	1.0
	1641679	79			0
12	1641680	75		Top 16": Dark yellowish-brown, fine(+) to coarse SAND, trace fine Gravel, trace Silt, wet, loose; Next 10": Dark yellowish-brown, fine(+) to medium Sand, trace coarse Sand, trace Silt, wet, loose; Bottom 10": Olive-grey, CLAY, trace brown, fine to very fine Sand and Silt, wet, dense, varved	1.0
	1641681	75			1.0
16				Bottom of Boring 16'	
20					
24					

Comments:

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GEOLOGIC BORING LOG

Project: VPSA Outside Drum Storage and Quonset H **LEA Comm No:** 68V7092 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 09/10/97 **End Date** 09/10/97	**Boring ID** **SK-SB-265**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1641682	42		Top 2": Organic debris; Bottom 18": Dark yellowish-brown, SILT with fine to very fine Sand, trace fibric organic matter, dry to slightly moist, loose	0
	1641683	42			0
4	1641684	58		Top 20": Pale brown to brown, fine to very fine SAND, little Silt, moist to wet, loose, wet at 8"; Bottom 8": Greyish-brown, fine(+) to medium SAND, wet, loose	2.0
	1641684	58			0
8	1641685	62		Brown to yellowish-brown, fine to medium SAND, little(-) coarse Sand, wet, loose, metal wire in sample tube	1.0
	1641686	75			0
12	1641687	75		Top 26": Yellowish-brown, fine to medium SAND, little(-) coarse Sand, trace Silt, wet, loose; Bottom 10": Olive-grey, CLAY, trace brown, fine to very gine Sand and Silt, wet, dense, varved	0
	1641688	75			0
16				Bottom of Boring 16'	
20					
24					

Comments:

Printed On: 2/13/1998

Boring No: SK-SB-265

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GEOLOGIC BORING LOG

Project: VPSA Outside Drum Storage and Quonset **LEA Comm No:** 68V7092 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 09/12/97 **End Date** 09/12/97	**Boring ID** SK-SB-266

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1641696	96		Top 2": Black bituminous asphalt; Next 6": Olive grey, fine to coarse SANd, some fine Gravel, trace coarse Gravel, trace Silt, slightly moist, loose; Next 16": Dark brown, SILT, trace fine to very fine Sand, fibric and sapric organic matter, slightly moist, loose; Bottom 22": Strong brown, fine to very fine SAND, with Silt, grading to fine SAND, trace medium Sand, slightly moist to moist, loose	200.0
	1641697				0
4	1641698	62		Top 3": Same as above, last 22": Middle 5": Grey, SILT, little fine to very fine Sand, wet, dense, orange mottles; Bottom 22": Brown, fine to very fine SAND, trace Silt, grading to fine to medium SAND, wet, loose	2.0
	1641699				2.0
8	1641700	67		Brown to yellowish brown, fine(+) to medium SAND, trace coarse Sand, trace Silt, wet, loose	4.0
	1641701 1641702				10.0
12	1641703	62		Yellowish brown, fine to coarse SAND, trace Silt, wet, loose, Clay in tip (not sampled)	20.0
	1641704				1.0
16				Bottom of Boring at 16'	
20					
24					

Comments:

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Printed On: 2/13/1998

Boring N. <-SB-266

GEOLOGIC BORING LOG

Project: VPSA Outside Drum Storage and Quonset H **LEA Comm No:** 68V7092 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 09/12/97 **End Date** 09/12/97	**Boring ID** **SK-SB-267**

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1641705	83		Top 3": Black bituminous asphalt; Next 6": Reddish brown, fine to coarse SAND, little Gravel, trace coarse Gravel, trace Silt, dry, loose; Next 20": Dark brown, fine to very fine SAND, little Silt, trace medium Sand, trace fibric and sapric organic matter at bottom 10", slightly moist to moist, loose; Next 4": olive grey, SILT, with fine to very fine Sand, moist, loose; Bottom 7": Brown, fine SAND, trace Silt, moist, loose	0.6
	1641706				300.0
4	1641707	71			480.0
	1641708			Top 5": Grey, SILT, trace fine to very fine Sand, moist, moderately dense; Next 10": Brown, fine to very fine SAND, little Silt, moist, loose; Bottomn 19": Reddish grey, fine to medium SAND, trace coarse Sand, trace Silt, wet, loose	600.0
8	1641709	62		Top 18": Greyish brown, medium to fine SAND, trace coarse Sand, trace Silt, wet, loose; Bottom 12": Yellowish brown, fine to very fine SAND, trace Silt, wet, loose	350.0
	1641710				200.0
12	1641711	88		Top 10": Same as above, last 12": Next 6": Dark yellowish brown, fine to coarse SAND, trace Silt, trace fine Gravel, wet, loose; Bottom 26": Olive grey, CLAY, trace brown, fine to very fine Sand and Silt, wet, dense, varved	2.0
	1641712				1.0
16				Bottom of Boring at 16'	
20					
24					

Comments:

Printed On: 2/13/1998

Boring No: SK-SB-267

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GEOLOGIC BORING LOG

Project: VPSA Outside Drum Storage and Quonset H **LEA Comm No:** 68V7092 **Client:** Pratt & Whitney **Location:** East Hartford, CT	**Start Date** 09/12/97 **End Date** 09/12/97	**Boring ID** SK-SB-268

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Elevation/ Depth	Sample Information: Sample No.	Recovery (%)	Blows /6"	Sample Description: Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1641713	100		Top 3": Organic debris; Next 6": Dark yellowish brown, SILT, with fine to very fine Sand, trace fibric organic matter, moist, loose; Next 4": Dark brown and black-stained, SILT, fibric and sapric organic matter, wet, loose; Next 12": Strong brown, SILT, trace fine to very fine Sand, little fibric organic matter, moist, loose; Bottom 23": Brown, SILT, with fine to very fine Sand, grading to light yellowish brown, fine SAND, trace medium Sand, moist, loose	25.0
	1641714				3.0
4	1641715	67		Top 2": Reddish brown, very fine SAND, wet, loose; Next 4": Grey, SILT, trace fine to very fine Sand, wet, moderately dense; Next 18": Brown, fine SAND, trace Silt, wet, loose; Bottom 8": Reddish grey, fine to medium SAND, trace Silt, wet, loose	6.0
	1641716				6.0
8	1641717	79		Top 8": Brown, medium to fine SAND, trace coarse Sand, trace Silt, wet, loose; Next 14": Brown, fine to very fine SAND, trace Silt, wet, loose; Next 10": Same as top 8"; Bottom 6": Same as second 14"	15.0
	1641718				5.0
12	1641719	75		Top 16": Yellowish brown, fine to coarse SAND, trace Silt, wet, loose; Bottom 20": Olive grey, CLAY, trace brown, fine to very fine Sand and Silt, wet, dense, varved	3.2
	1641720				1.0
16					
20					
24					

Comments:

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Description of Oversized Material, if applicable:

DRAWING TM5-2: SOIL INVESTIGATIONS, NORTHEAST PORTION, SOIL SAMPLING LOCATION MAP

[X] Map [ ] Photograph [ ] Other (Specify Below)

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Facility Name: PRATT & WHITNEY - MAIN STREET

Facility ID#: CTD990672081

Phase Classification: R-5

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Description of Oversized Material, if applicable:

DRAWING TM5-3: SOIL INVESTIGATIONS, SOUTHWEST PORTION, SOIL SAMPLING LOCATION MAP

[X] Map [ ] Photograph [ ] Other (Specify Below)

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